

## 2006 Buick Lucerne CXS

2006 SUSPENSION Rear Suspension - Lucerne

### 2006 SUSPENSION

#### Rear Suspension - Lucerne

## SPECIFICATIONS

### FASTENER TIGHTENING SPECIFICATIONS

#### Fastener Tightening Specifications

Application	Specification	
	Metric	English
Adjustment Link Cam Nut	91 N.m	67 lb ft
Control Arm Nuts	106 N.m	78 lb ft
Hub and Bearing Bolts	68 N.m	50 lb ft
Rear Body Mount Bolts	51 N.m	38 lb ft
Shock to Control Arm Bolts	24 N.m	18 lb ft
Shock Tower Mounting Nut	20 N.m	15 lb ft
Stabilizer Shaft Clamp Bolt	33 N.m	24 lb ft
Stabilizer Shaft Link Bolt	13 N.m	10 lb ft

## REPAIR INSTRUCTIONS

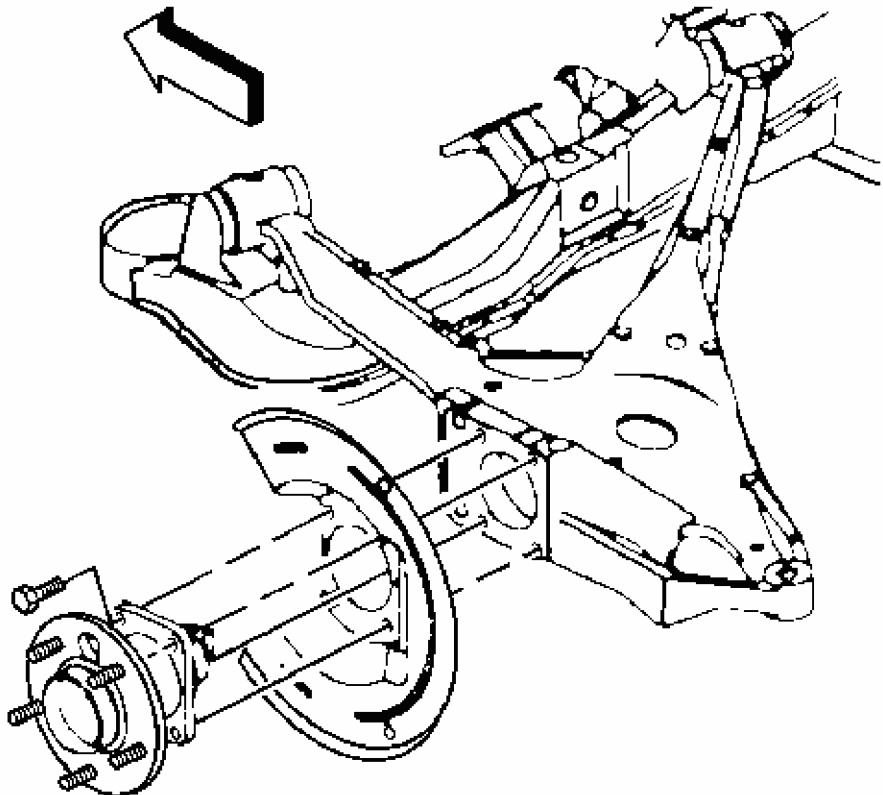
### REAR WHEEL BEARING AND HUB REPLACEMENT

#### Removal Procedure

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#).
3. Remove the brake rotor. Refer to [Rear Brake Rotor Replacement](#).
4. Disconnect the wheel bearing/hub electrical connector.

## 2006 Buick Lucerne CXS

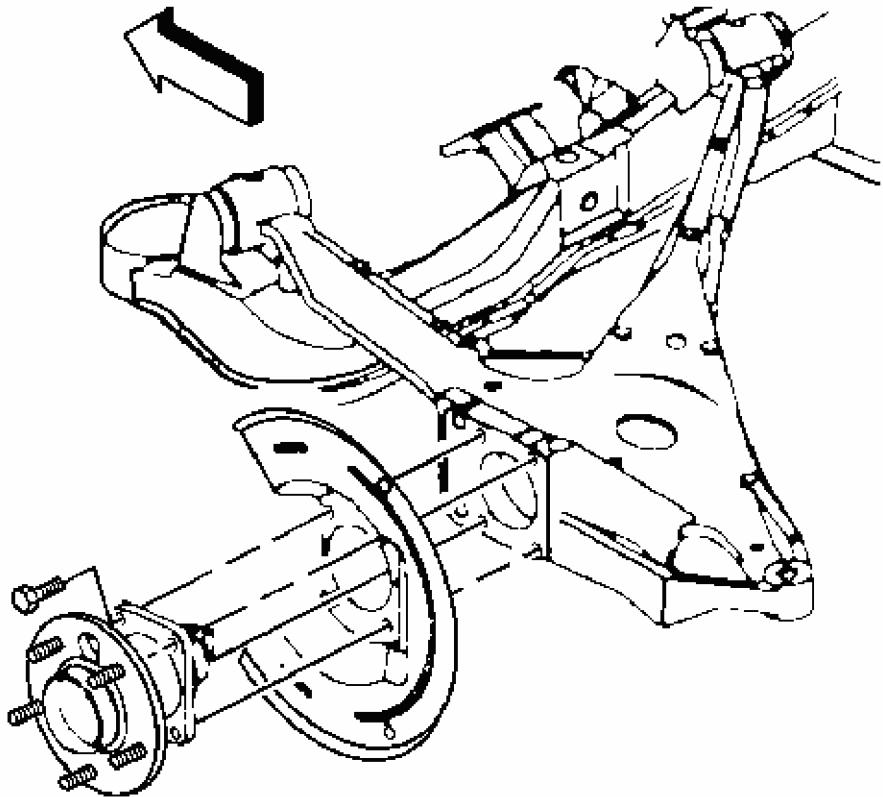
### 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 1: Removing/Installing Rear Wheel Bearing/Hub Assembly**  
Courtesy of GENERAL MOTORS CORP.

5. Remove the wheel bearing/hub retaining bolts.
6. Remove the wheel bearing/hub lower.
7. Remove the brake shield from the lower control arm.
8. Clean the control arm face and the bore before installing the hub and the bearing.

#### Installation Procedure



**Fig. 2: Removing/Installing Rear Wheel Bearing/Hub Assembly**  
Courtesy of GENERAL MOTORS CORP.

1. Install the brake shield and the wheel bearing/hub to the control arm.

**NOTE:** Refer to Fastener Notice.

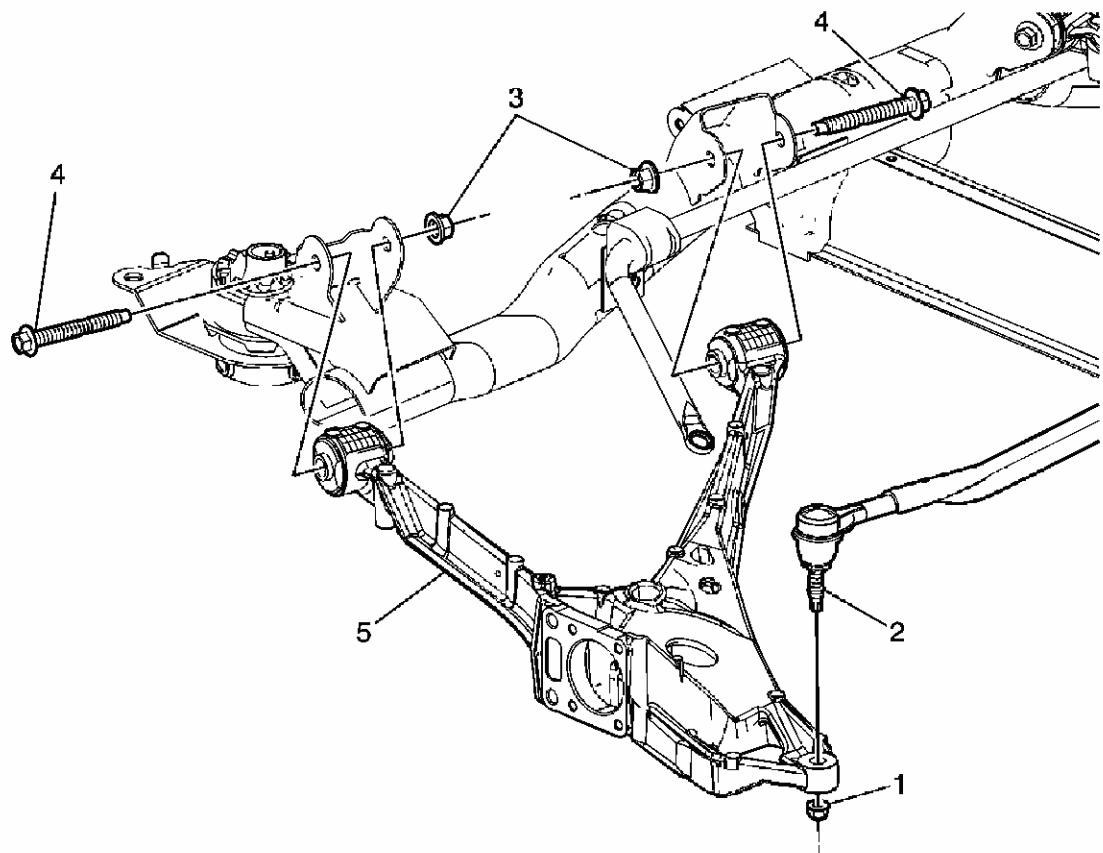
2. Install the wheel bearing/hub retaining bolts.

**Tighten:** Tighten the wheel bearing/hub bolts to 68 N.m (50 lb ft).

3. Connect the wheel/hub electrical connector.
4. Install the brake rotor. Refer to Rear Brake Rotor Replacement.
5. Install the tire and wheel. Refer to Tire and Wheel Removal and Installation.
6. Lower the vehicle.

## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 3: Identifying Rear Axle Lower Control Arm Components**  
Courtesy of GENERAL MOTORS CORP.

#### Rear Axle Lower Control Arm Replacement

Callout	Component Name
<b>NOTE:</b> Refer to <a href="#"><u>Fastener Notice</u></a> .	
<b>Fastener Tightening Specifications:</b> Refer to <a href="#"><u>Fastener Tightening Specifications</u></a> . <b>Tool Required:</b> J 24319-B Steering Linkage Puller	
<b>Preliminary Procedures</b>	
<ol style="list-style-type: none"><li>1. Raise and support the vehicle. Refer to <a href="#"><u>Lifting and Jacking the Vehicle</u></a>.</li><li>2. Remove the rear tire and wheel assembly. Refer to <a href="#"><u>Tire and Wheel Removal and Installation</u></a>.</li><li>3. Remove the wheel bearing/hub. Refer to <a href="#"><u>Rear Wheel Bearing and Hub Replacement</u></a>.</li><li>4. Remove the rear leveling sensor link from the control arm, if equipped. Refer to <a href="#"><u>Automatic Level Control Sensor Replacement</u></a>.</li></ol>	

## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne

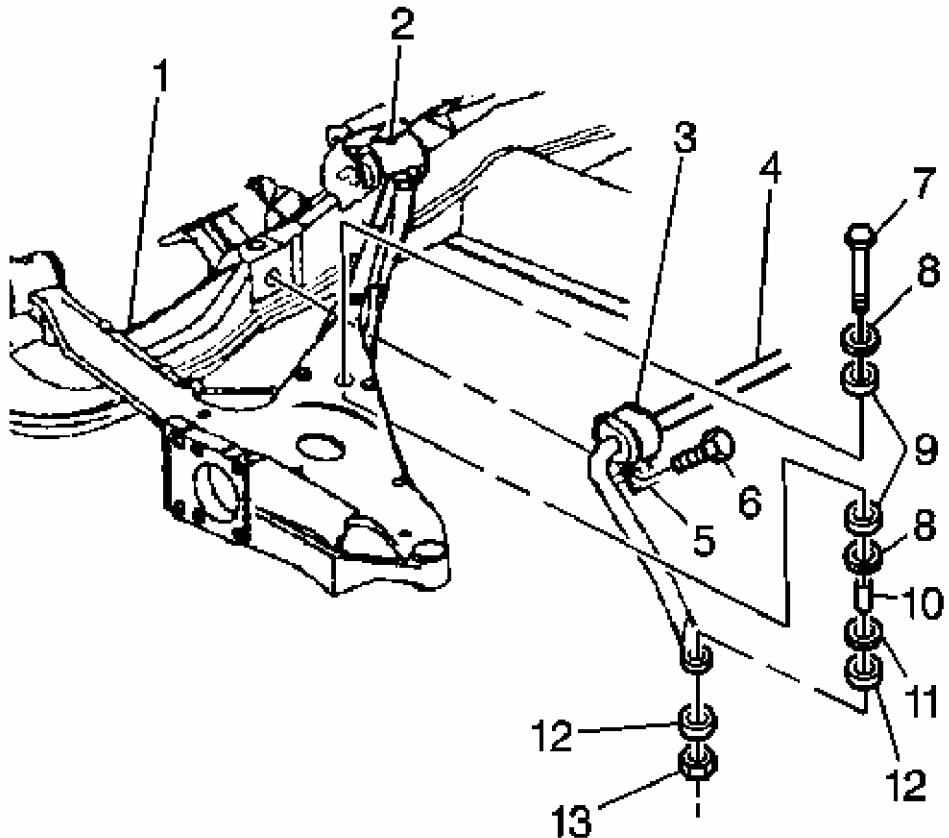
5. Remove the stabilizer shaft link. Refer to [Stabilizer Shaft Link Replacement](#).
6. Remove the rear suspension support. Refer to [Rear Support Replacement](#).

1	Rear Adjusting Link Nut  <b>Tighten:</b> 30 N.m (22 lb ft) plus an additional 180 degrees
2	Rear Adjusting Link <b>Tip:</b> Use the <b>J 24319-B</b> to remove the adjusting link from the control arm.
3	Rear Control Arm Nut (Qty: 2)  <b>Tighten:</b> 91 N.m (267 lb ft).
4	Rear Control Arm Bolt (Qty: 2) <b>Tip:</b> Support the control arm before removing the bolts.
5	Rear Control Arm

## STABILIZER SHAFT REPLACEMENT

### Removal Procedure

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the stabilizer shaft links. Refer to [Stabilizer Shaft Link Replacement](#).

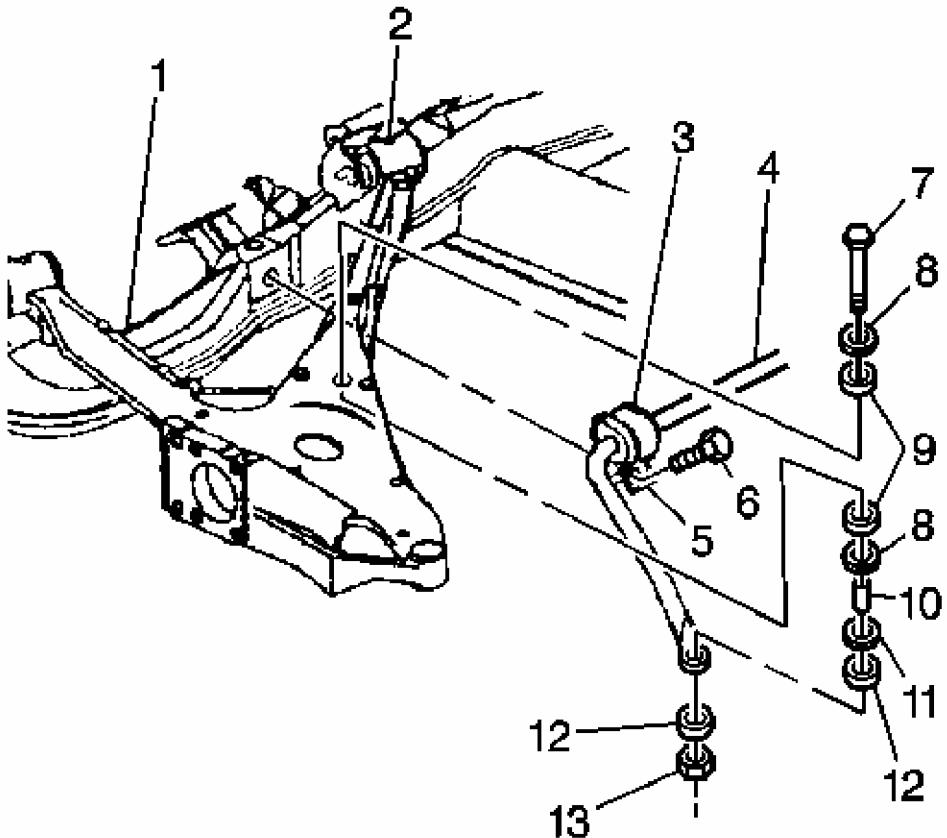


**Fig. 4: Removing/Installing Stabilizer Shaft**

Courtesy of GENERAL MOTORS CORP.

3. Remove the stabilizer shaft insulator bracket bolt (6).
4. Bend the open end of the clamp (5) upward.
5. Remove the stabilizer shaft insulators (3).
6. Remove the stabilizer shaft.

**Installation Procedure**



**Fig. 5: Removing/Installing Stabilizer Shaft**

Courtesy of GENERAL MOTORS CORP.

1. Install the stabilizer shaft (4) to the vehicle.
2. Install the stabilizer shaft insulators to the stabilizer shaft with the slits forward.
3. Bend the stabilizer shaft insulator brackets downward.

**NOTE:** Refer to FASTENER NOTICE.

**NOTE:** Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants or corrosion inhibitors on fasteners or fastener

**joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.**

4. Install the stabilizer shaft bracket retaining bolt.

**Tighten:** Tighten the stabilizer shaft bracket retaining bolts to 33 N.m (24 lb ft).

5. Install the stabilizer shaft links. Refer to [\*\*Stabilizer Shaft Link Replacement\*\*](#).
6. Lower the vehicle.

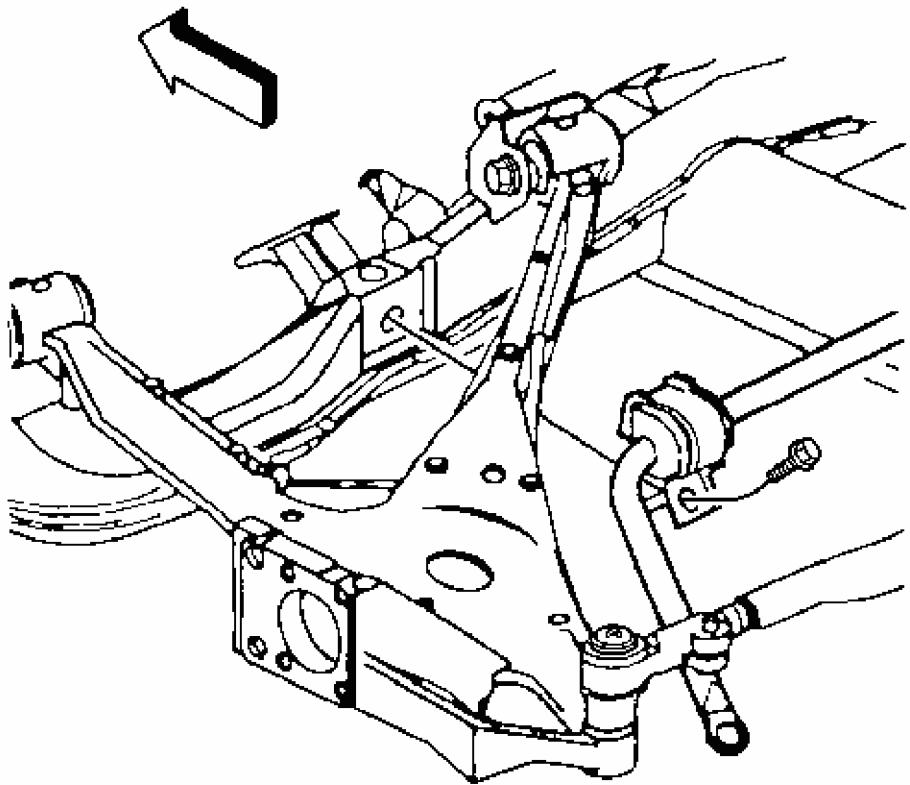
## **STABILIZER SHAFT INSULATOR REPLACEMENT**

### **Removal Procedure**

1. Raise and support the vehicle. Refer to [\*\*Lifting and Jacking the Vehicle\*\*](#).

**2006 Buick Lucerne CXS**

2006 SUSPENSION Rear Suspension - Lucerne

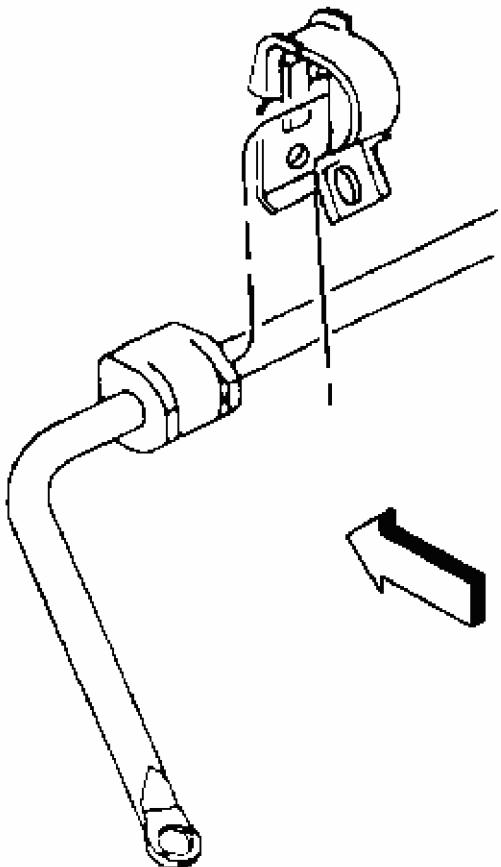


**Fig. 6: Removing/Installing Stabilizer Shaft Insulator Bracket Retaining Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

2. Remove the stabilizer shaft bracket retaining bolt.

## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne



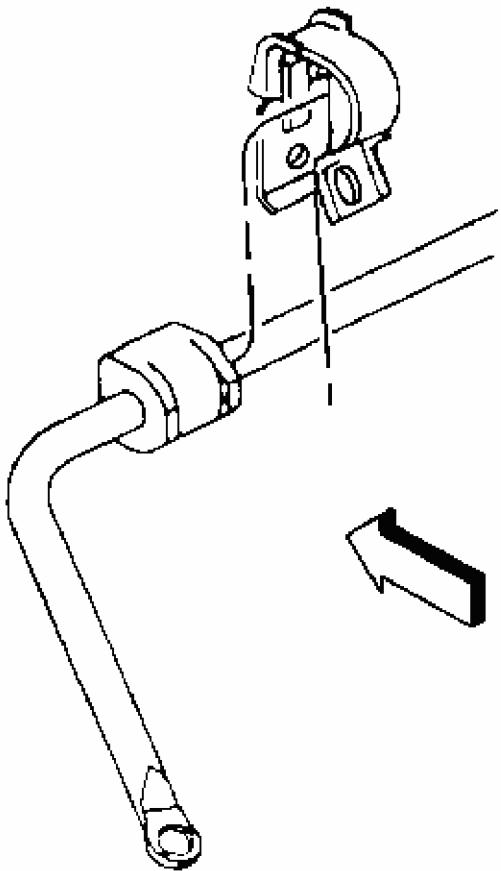
**Fig. 7: Removing/Installing Stabilizer Shaft Insulator**  
Courtesy of GENERAL MOTORS CORP.

3. Bend the open end of the stabilizer shaft bracket upward.
4. Remove the stabilizer shaft and insulator.

#### Installation Procedure

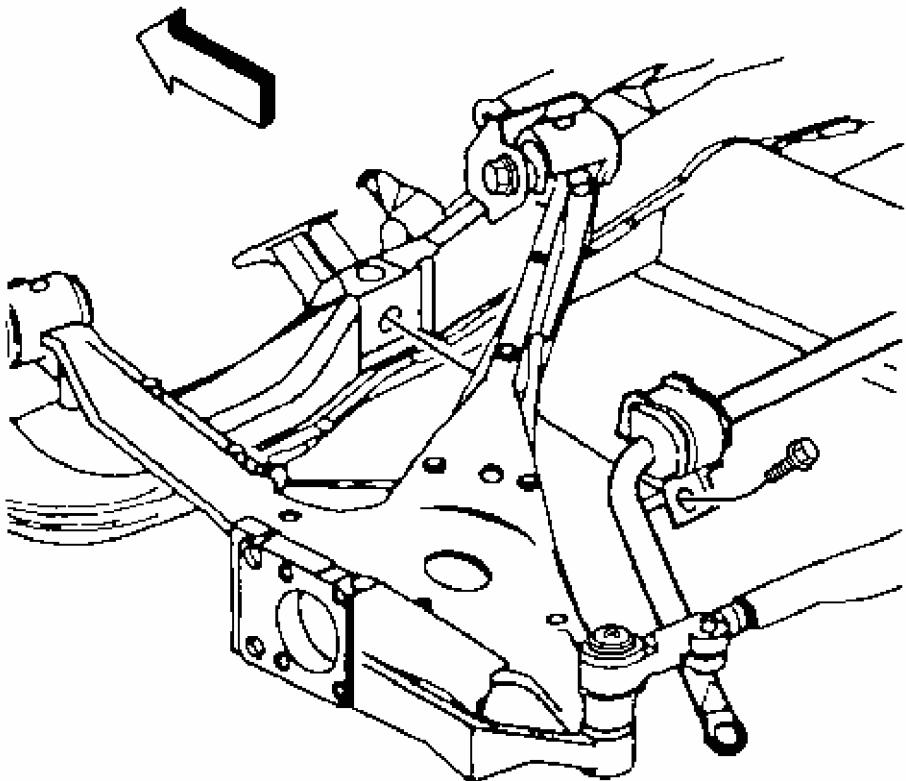
## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 8: Removing/Installing Stabilizer Shaft Insulator**  
Courtesy of GENERAL MOTORS CORP.

1. Install the stabilizer shaft insulator to the stabilizer shaft with the slit forward.



**Fig. 9: Removing/Installing Stabilizer Shaft Insulator Bracket Retaining Bolts**  
Courtesy of GENERAL MOTORS CORP.

2. Bend the stabilizer shaft bracket downward to close around the insulator. Ensure that the stabilizer shaft is centered.

**NOTE:** Refer to FASTENER NOTICE.

**NOTE:** Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and

**specifications when installing fasteners in order to avoid damage to parts and systems.**

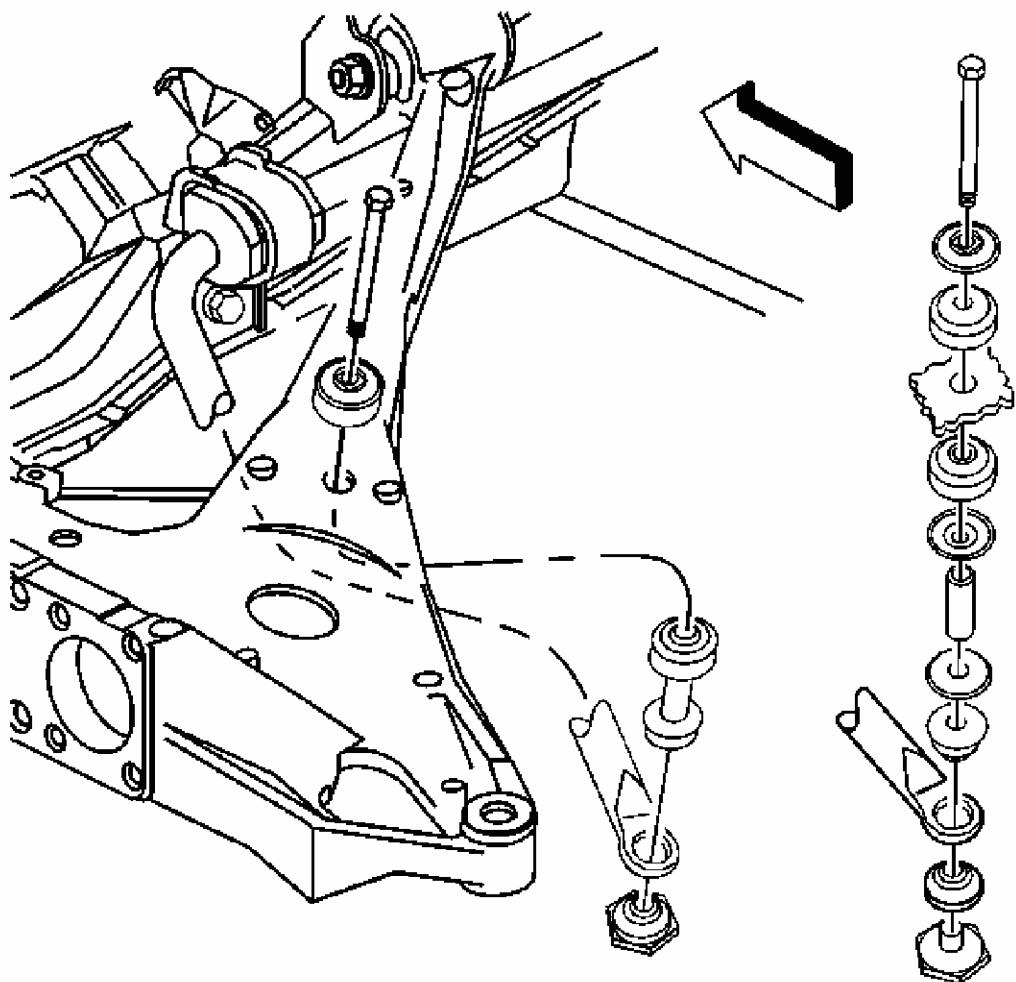
3. Install the stabilizer shaft bracket retaining bolt.

**Tighten:** Tighten the stabilizer shaft bracket retaining bolt to 33 N.m (24 lb ft).

4. Lower the vehicle.

### STABILIZER SHAFT LINK REPLACEMENT

#### Removal Procedure

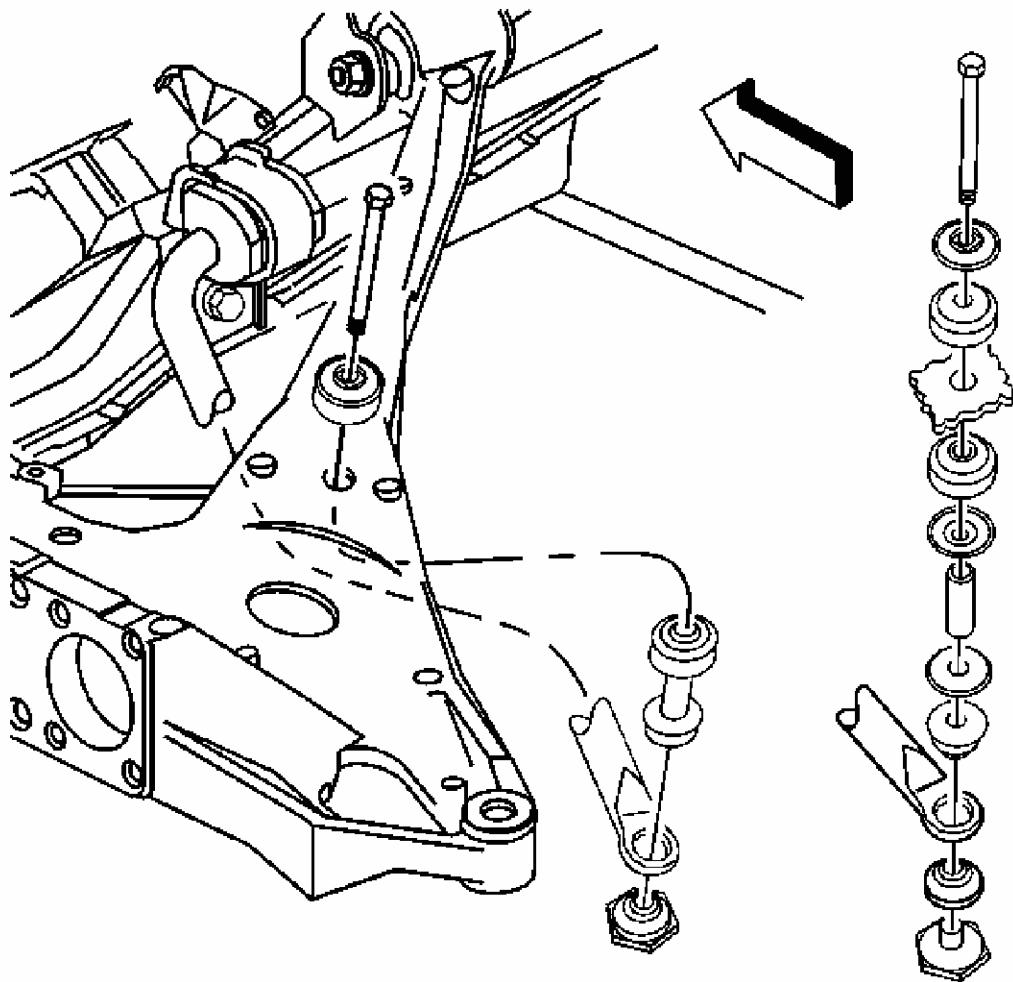


**Fig. 10: Removing/Installing Stabilizer Shaft Link**

Courtesy of GENERAL MOTORS CORP.

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the stabilizer shaft link bolts.
3. Remove the stabilizer shaft link insulators and spacer.

**Installation Procedure**



**Fig. 11: Removing/Installing Stabilizer Shaft Link**  
Courtesy of GENERAL MOTORS CORP.

**NOTE:** Refer to [FASTENER NOTICE](#).

**NOTE:** Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that

**application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.**

1. Loosely install the stabilizer link insulators, spacer, nut and bolt.

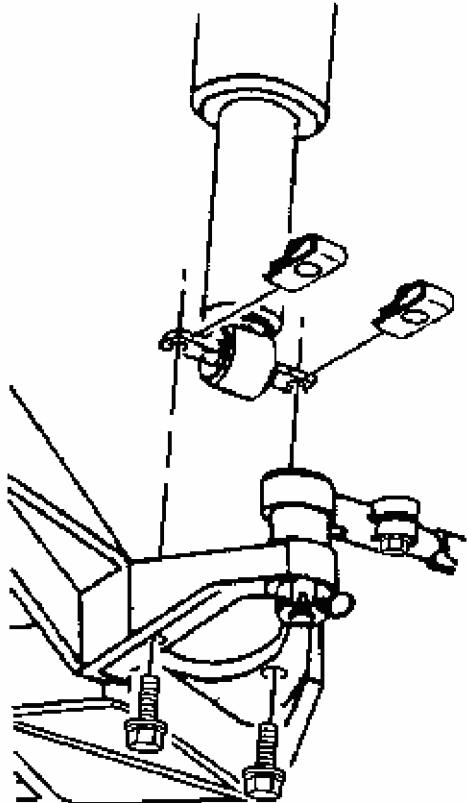
**Tighten:** Tighten the stabilizer shaft link nut to 15 N.m (11 lb ft).

2. Lower the vehicle.

## **SHOCK ABSORBER REPLACEMENT**

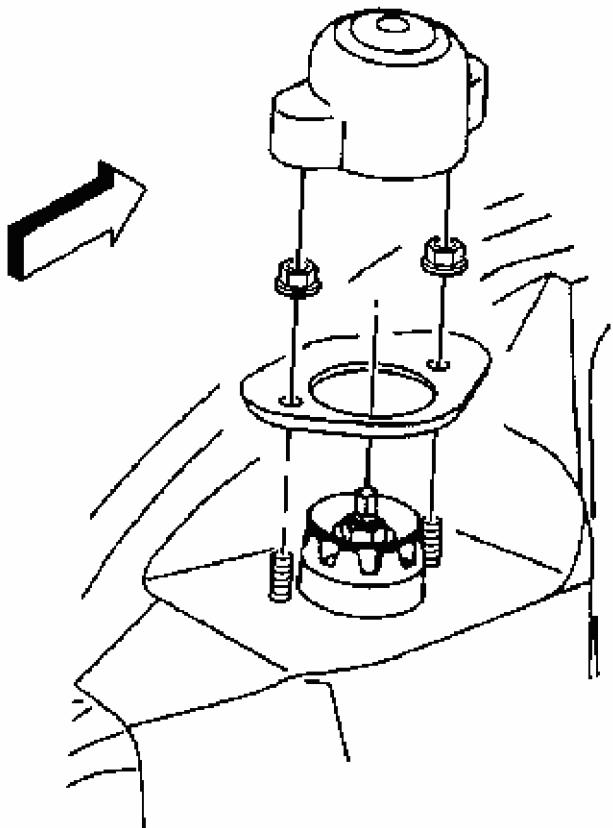
### **Removal Procedure**

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#) .
2. Remove the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#) .



**Fig. 12: Removing/Installing Shock Absorber Lower Retaining Bolts**  
Courtesy of GENERAL MOTORS CORP.

3. Support the control arm with a jack stand.
4. Disconnect the automatic level control air tube from the shock.
5. Remove the lower shock absorber retaining bolts.
6. Remove the trunk trim to gain access to the shock absorber upper mounting nuts.

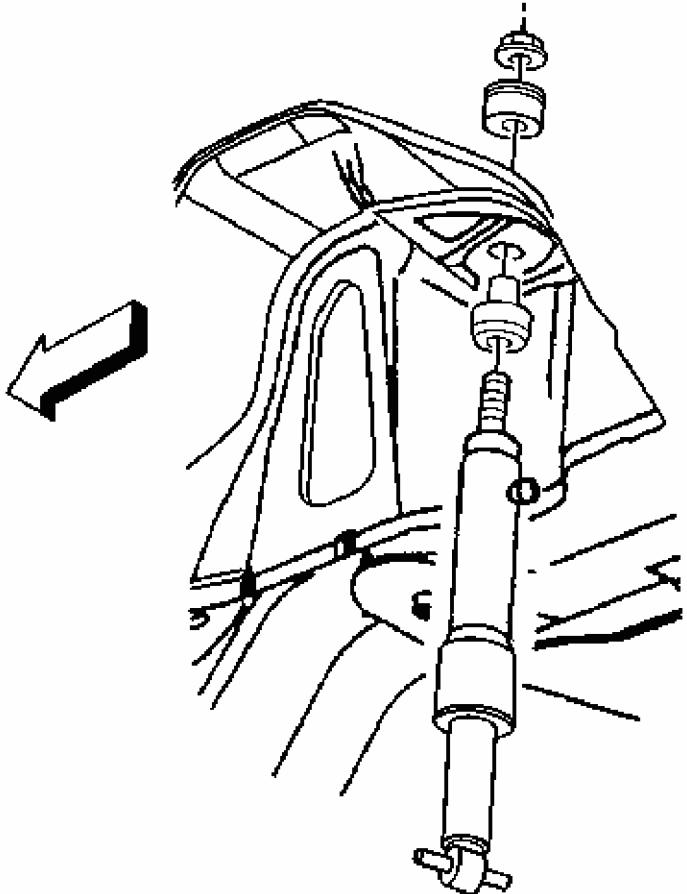


**Fig. 13: Removing/Installing Shock Absorber Upper Retaining Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

7. Remove the upper shock absorber cover.
8. Remove the upper shock absorber retaining nuts.
9. Remove the upper shock absorber reinforcement.

## 2006 Buick Lucerne CXS

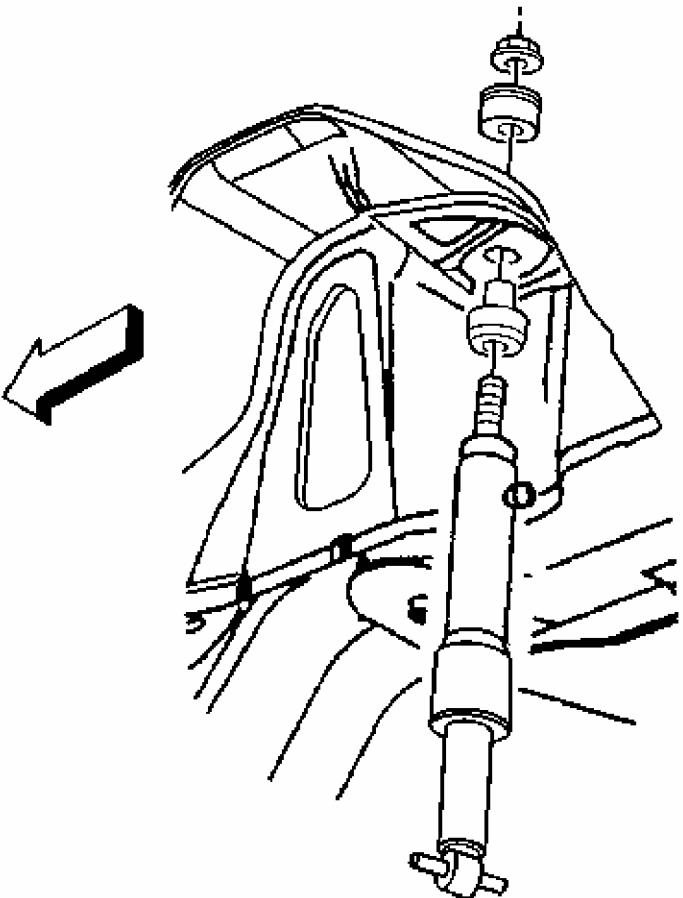
### 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 14: Removing/Installing Shock Absorber**  
Courtesy of GENERAL MOTORS CORP.

10. Remove the shock from the vehicle.

#### Installation Procedure



**Fig. 15: Removing/Installing Shock Absorber**  
Courtesy of GENERAL MOTORS CORP.

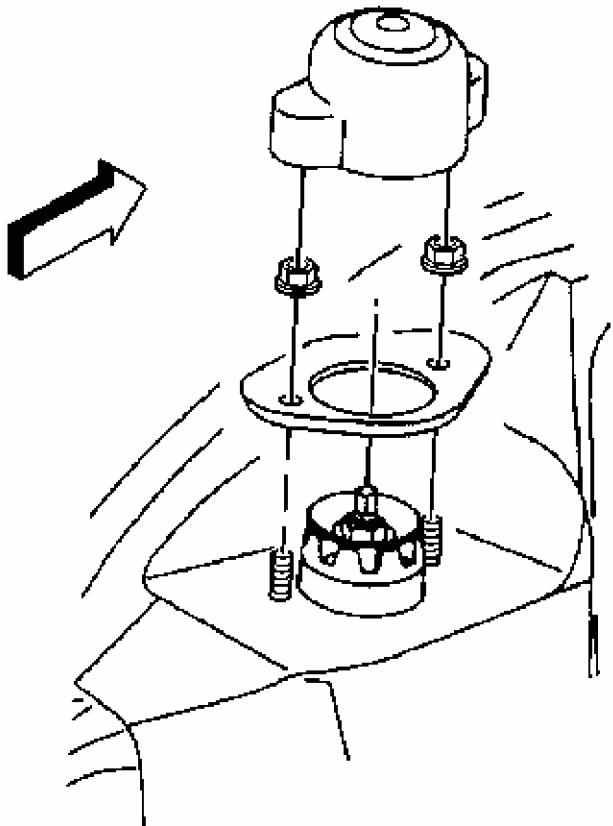
NOTE: Refer to FASTENER NOTICE.

NOTE: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and

**specifications when installing fasteners in order to avoid damage to parts and systems.**

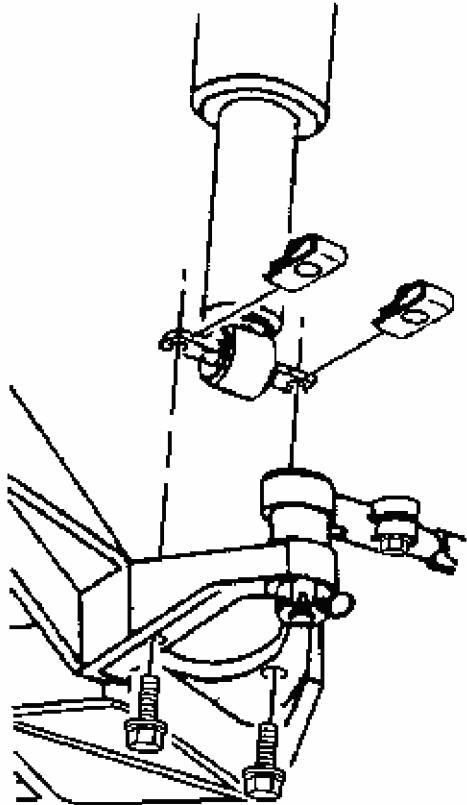
1. Install the shock, reinforcement and the retaining nuts.

**Tighten:** Tighten the upper shock absorber retaining nuts to 25 N.m (18 lb ft).



**Fig. 16: Removing/Installing Shock Absorber Upper Retaining Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

2. Install the upper shock absorber cover.
3. Install the trunk trim.



**Fig. 17: Removing/Installing Shock Absorber Lower Retaining Bolts**  
Courtesy of GENERAL MOTORS CORP.

4. Install the lower shock absorber retaining bolts.

**Tighten:** Tighten the lower shock absorber retaining bolts to 25 N.m (18 lb ft).

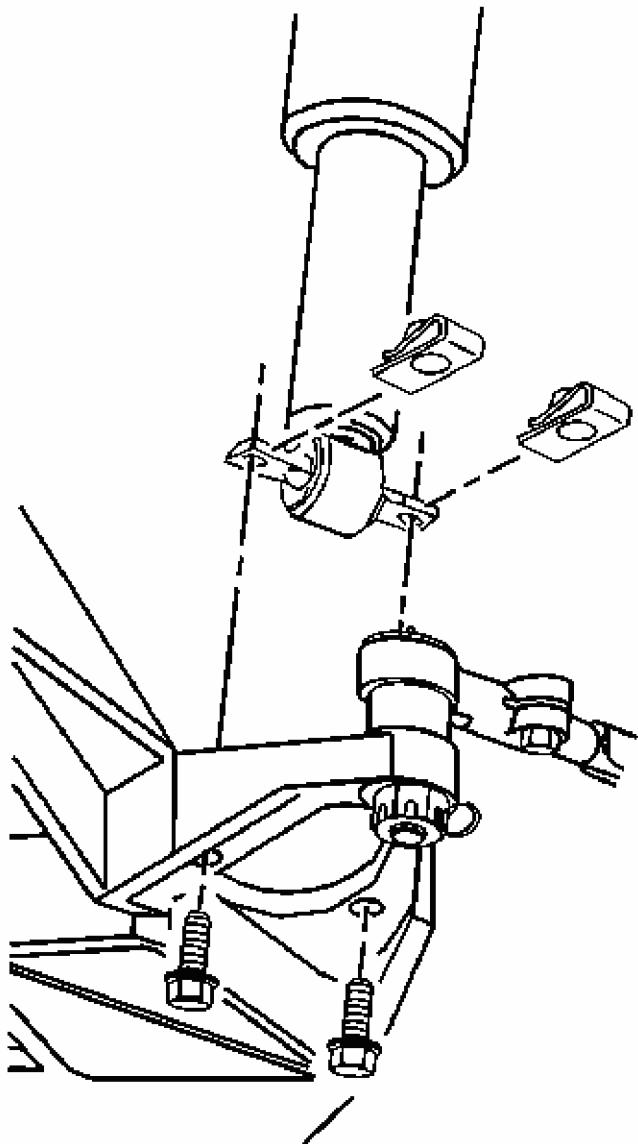
5. Connect the automatic level control air tube to the shock.
6. Install the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#).
7. Lower the vehicle.

## COIL SPRING REPLACEMENT

### Tools Required

**J 24319-B** Universal Steering Linkage Puller

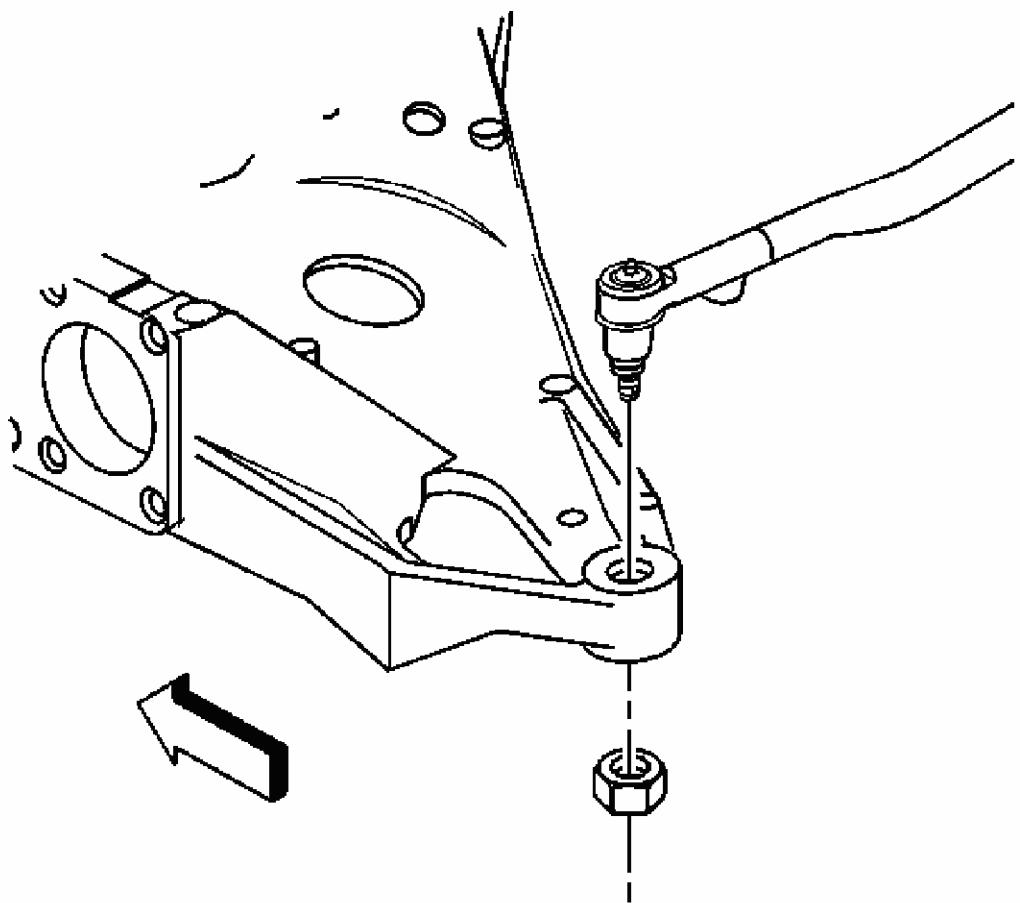
### Removal Procedure



**Fig. 18: Removing/Installing Shock Absorber Lower Retaining Bolts**  
Courtesy of GENERAL MOTORS CORP.

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#).
3. Support the control arm with a suitable jack.
4. Remove the automatic level control sensor link from the control arm.
5. Remove the lower shock absorber retaining bolts.

6. Disconnect the stabilizer link from the control arm. Refer to [\*\*Stabilizer Shaft Link Replacement\*\*](#).
7. Remove the rear caliper pin bolts.
8. Using heavy wire, hang the rear brake caliper.

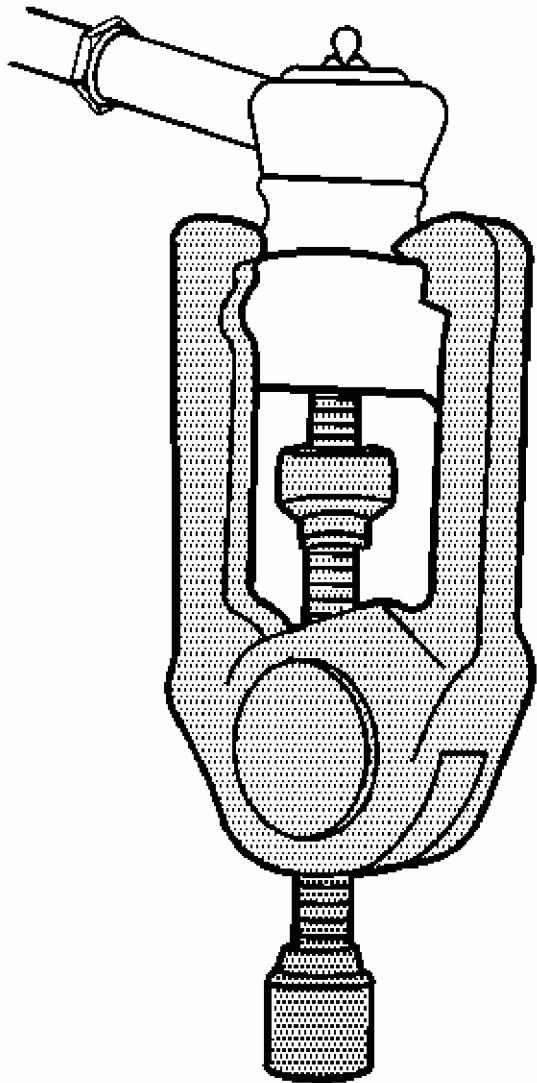


**Fig. 19: Adjustment Link To Lower Control Arm**  
Courtesy of GENERAL MOTORS CORP.

9. Remove the adjustment link retaining nut.

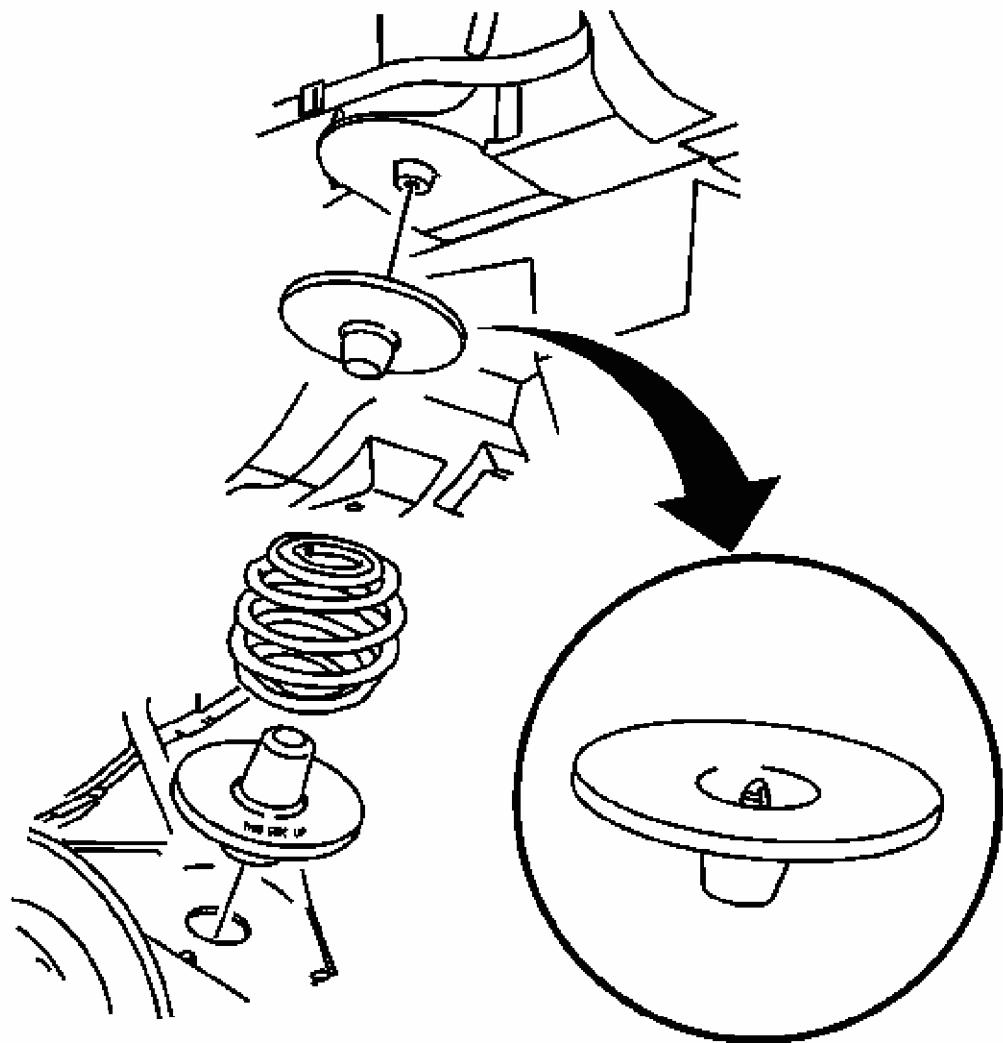
**2006 Buick Lucerne CXS**

2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 20: Removing Outer Tie Rod Assembly From Steering Knuckle**  
**Courtesy of GENERAL MOTORS CORP.**

10. Using **J 24319-B** separate the adjustment link from the lower control arm.

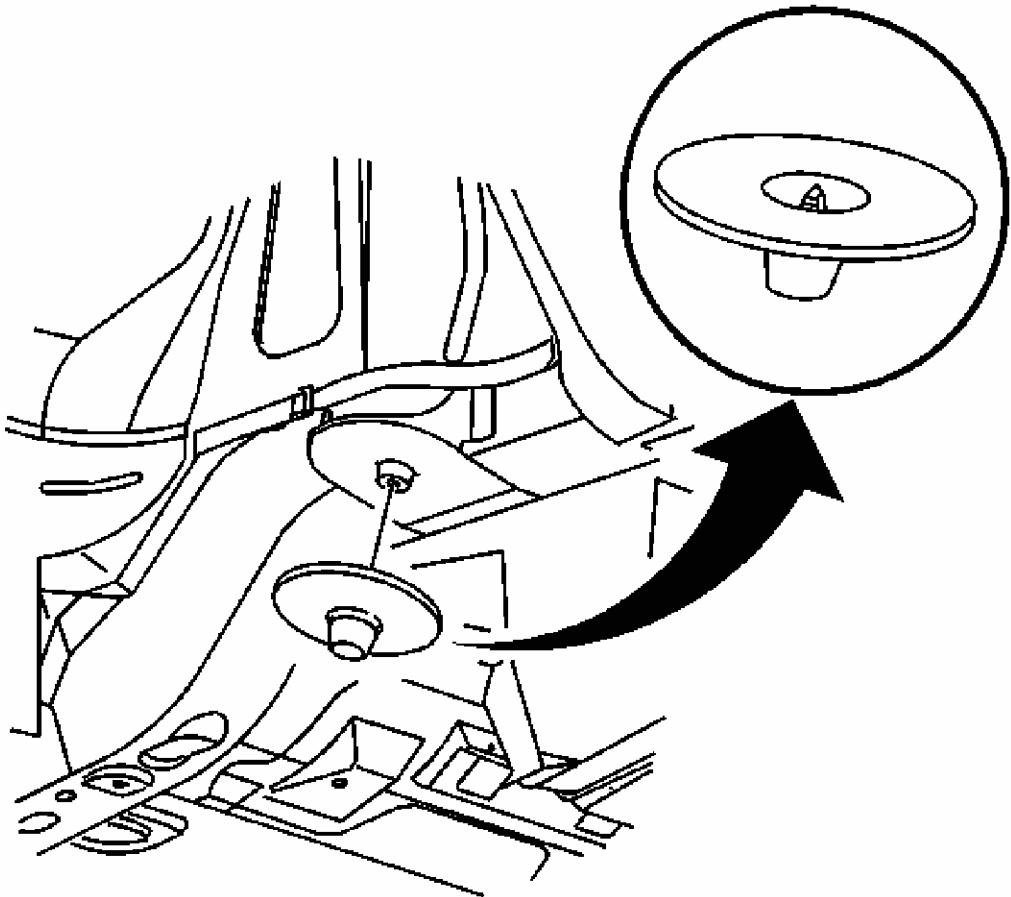


**Fig. 21: Removing Lower Control Arm Upper Insulator & Spring**  
**Courtesy of GENERAL MOTORS CORP.**

11. Slowly lower the lower control arm until it bottoms on the support assembly.
12. Using a pry bar, pry under the lower coil spring insulator and remove the coil spring with the insulator.
13. Remove the upper coil spring insulator by pulling downward.
14. Separate the lower control arm insulator from the coil spring.

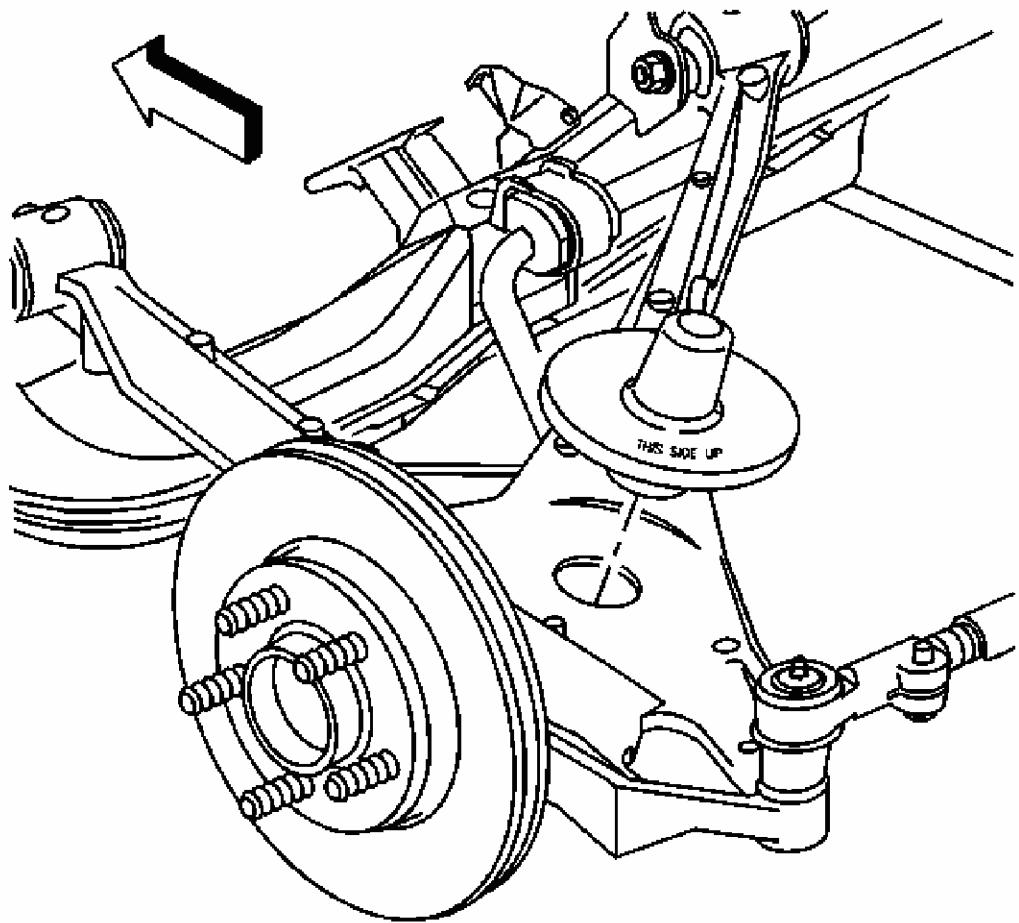
## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne



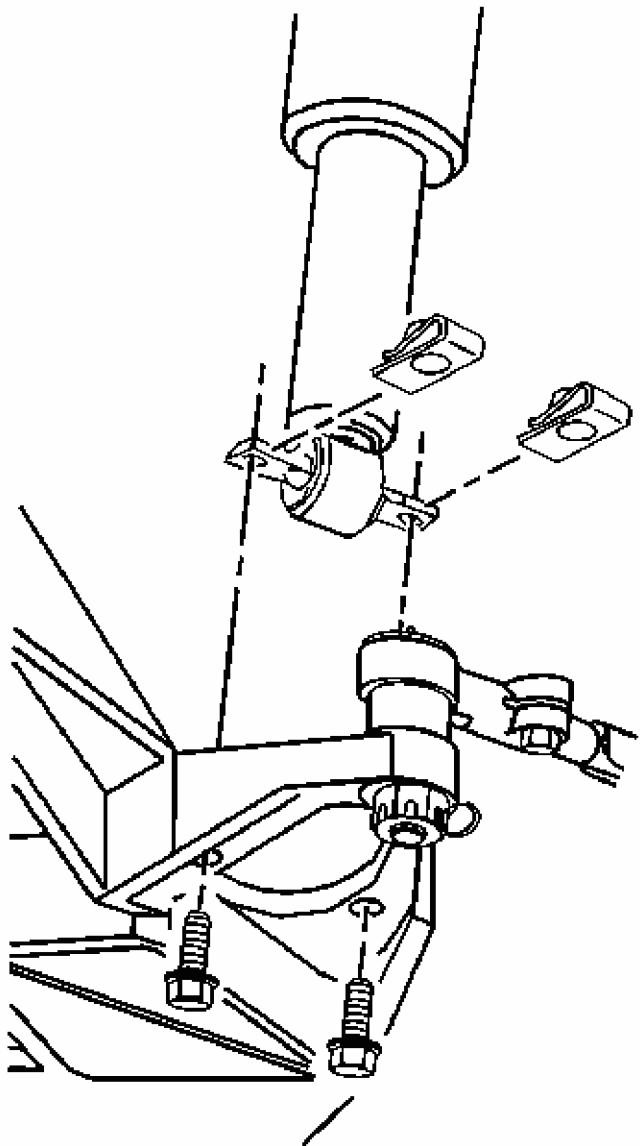
**Fig. 22: Installing Upper Insulator In Body**  
Courtesy of GENERAL MOTORS CORP.

1. Install the upper coil spring insulator to the body.



**Fig. 23: Installing Shock Absorber Control Arm Lower Insulator**  
Courtesy of GENERAL MOTORS CORP.

2. Install the lower coil spring insulator in the control arm.
3. Install the coil spring ensuring that the coil spring insulators are seated in the upper and lower control arms.



**Fig. 24: Removing/Installing Shock Absorber Lower Retaining Bolts**  
Courtesy of GENERAL MOTORS CORP.

**NOTE:** Refer to FASTENER NOTICE.

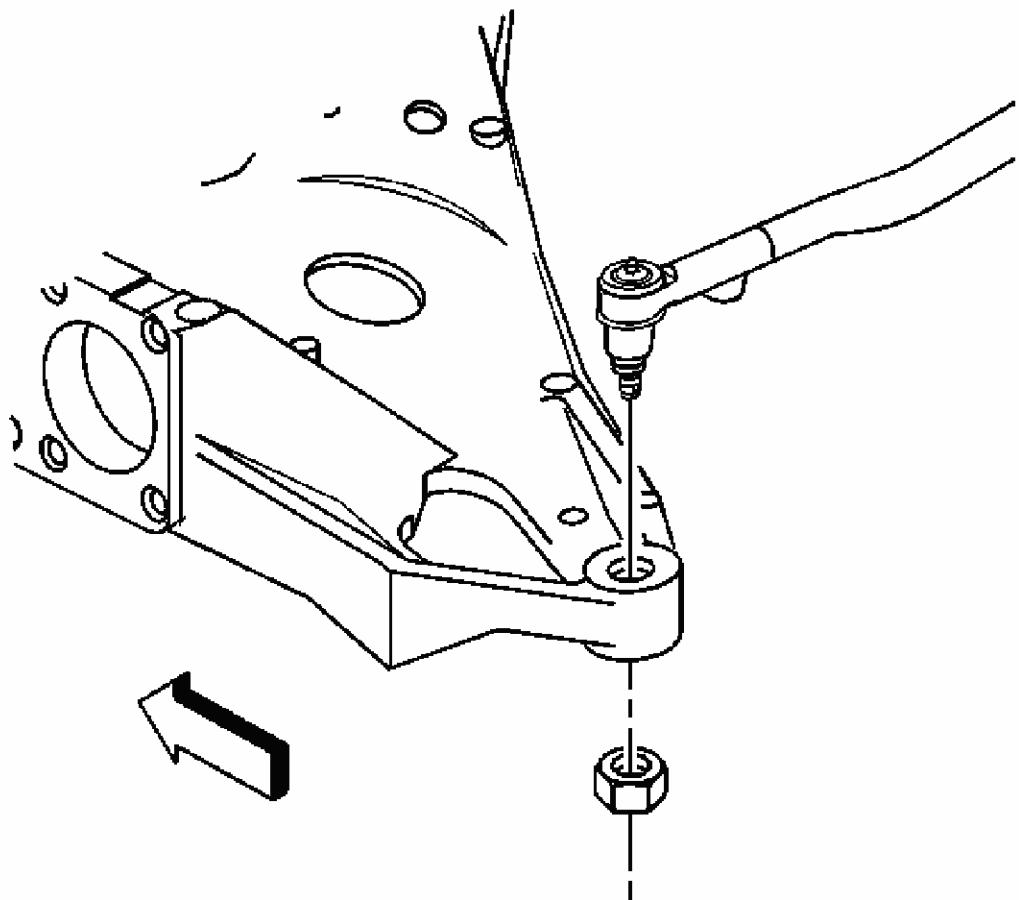
4. Raise the lower control arm and install the shock absorber retaining bolts in the lower control arm.

**Tighten:** Tighten the lower shock absorber retaining bolts to 25 N.m (18 lb ft).

5. Attach the rear brake caliper to the bracket using the caliper guide pin bolts.

**Tighten:** Tighten the caliper guide pin bolts to 34 N.m (25 lb in).

6. Install the stabilizer link. Refer to **Stabilizer Shaft Link Replacement**.

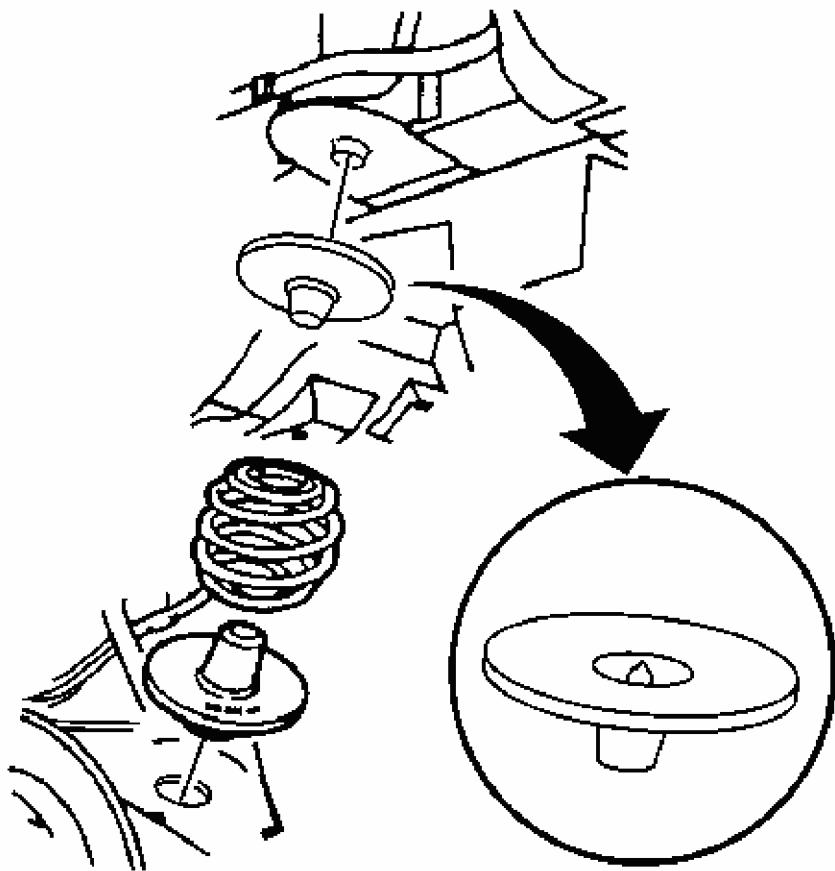


**Fig. 25: Adjustment Link To Lower Control Arm**  
Courtesy of GENERAL MOTORS CORP.

7. Install the adjustment link to the control arm.

**Tighten:** Tighten adjustment link retaining nut to 30 N.m (22 lb ft) plus 180 degrees.

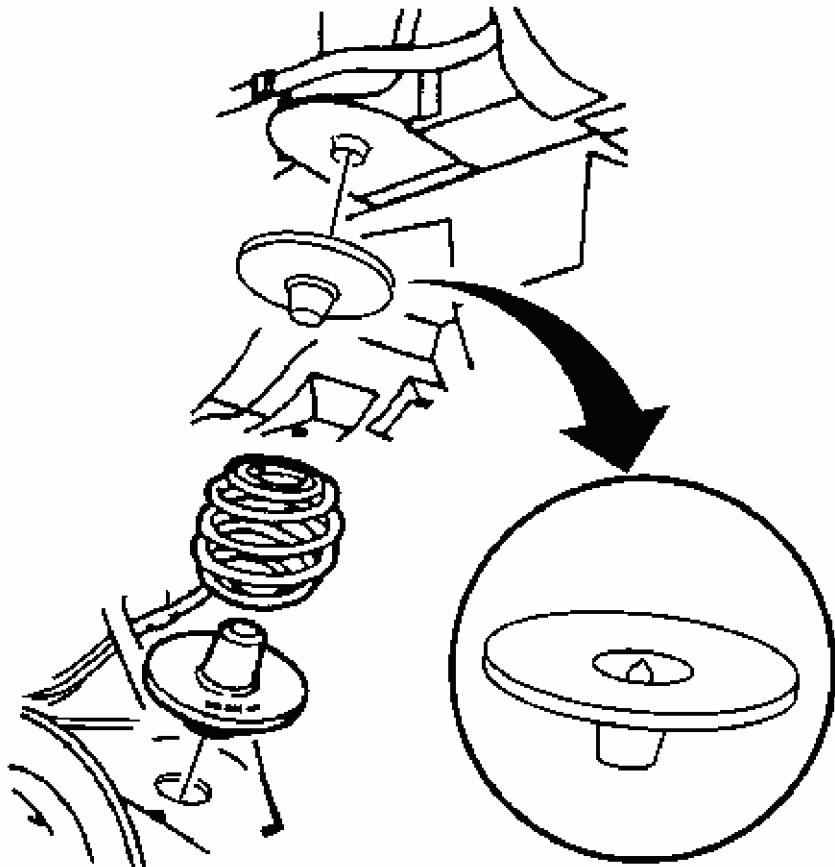
8. Connect the automatic level control sensor link to the control arm.
9. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation**.
10. Lower the vehicle.

**COIL SPRING INSULATORS REPLACEMENT****Tools Required****J 24319-B** Universal Steering Linkage Puller**Removal Procedure**

**Fig. 26: Removing/Installing Upper & Lower Coil Spring Insulator**  
Courtesy of GENERAL MOTORS CORP.

1. Remove the coil from the vehicle. Refer to [Coil Spring Replacement](#)
2. Remove the upper coil spring insulator, by pulling downward.
3. Separate the lower insulator from the coil spring.

**Installation Procedure**



**Fig. 27: Removing/Installing Upper & Lower Coil Spring Insulator**  
Courtesy of GENERAL MOTORS CORP.

1. Install the upper coil spring insulator by inserting the coil spring insulator retainer into the body of the vehicle.
2. Install the lower coil spring insulator to the coil spring.
3. Install the coil spring. Refer to [Coil Spring Replacement](#)

## **FORWARD BODY MOUNT REPLACEMENT**

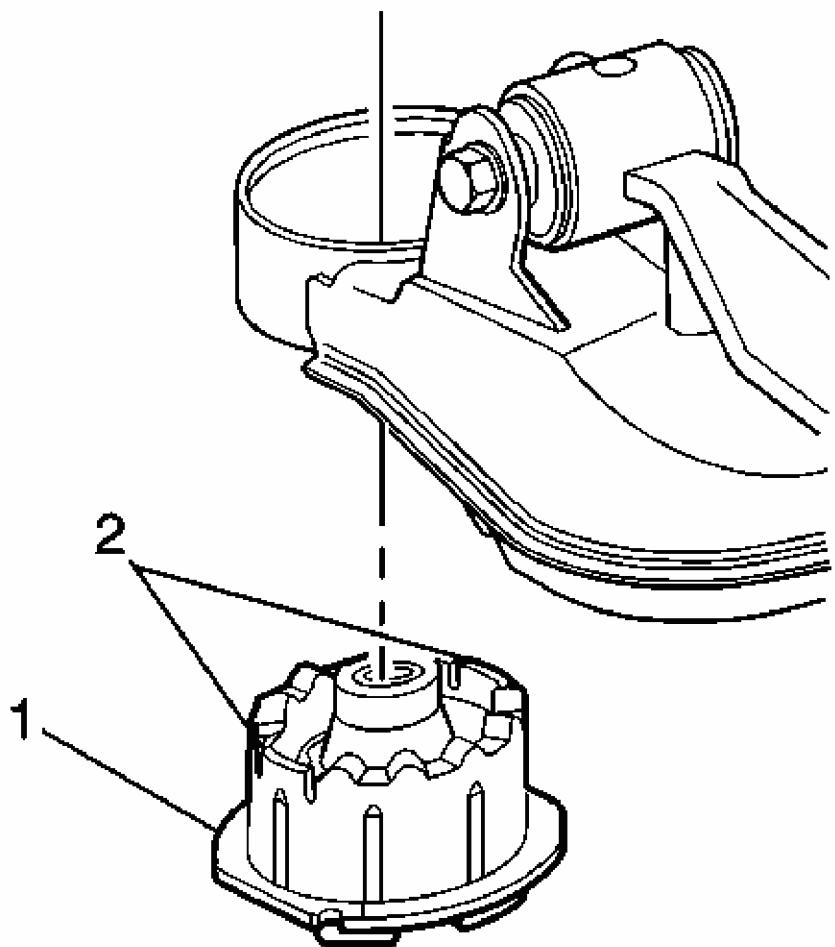
### **Removal Procedure**

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the exhaust system. Refer to [Exhaust System Replacement \(RPO L26\)](#) or [Exhaust System Replacement \(RPO LD8\)](#).

## 2006 Buick Lucerne CXS

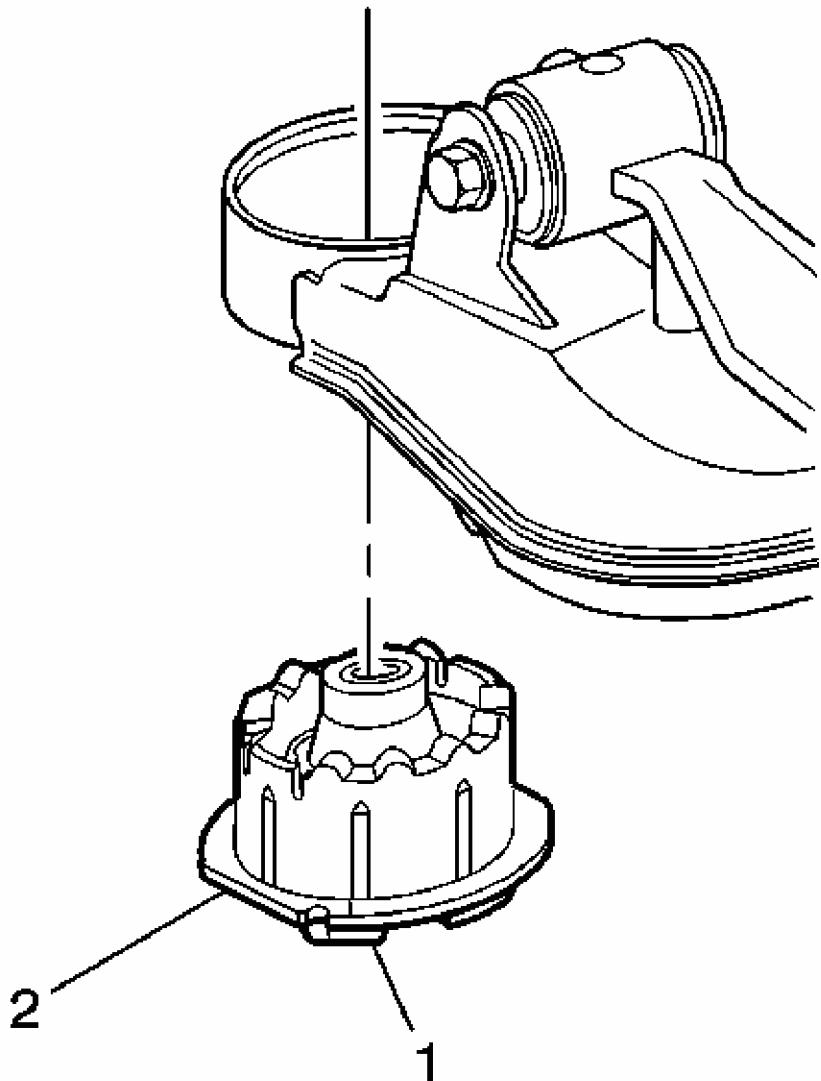
### 2006 SUSPENSION Rear Suspension - Lucerne

3. Support the forward end of the rear suspension support assembly with a jack stand.
4. Remove the brackets from the body at the support assembly forward mounts.
5. Remove the two bolts securing the front of the support assembly to the body of the vehicle.



**Fig. 28: Removing Forward Body Mount**  
Courtesy of GENERAL MOTORS CORP.

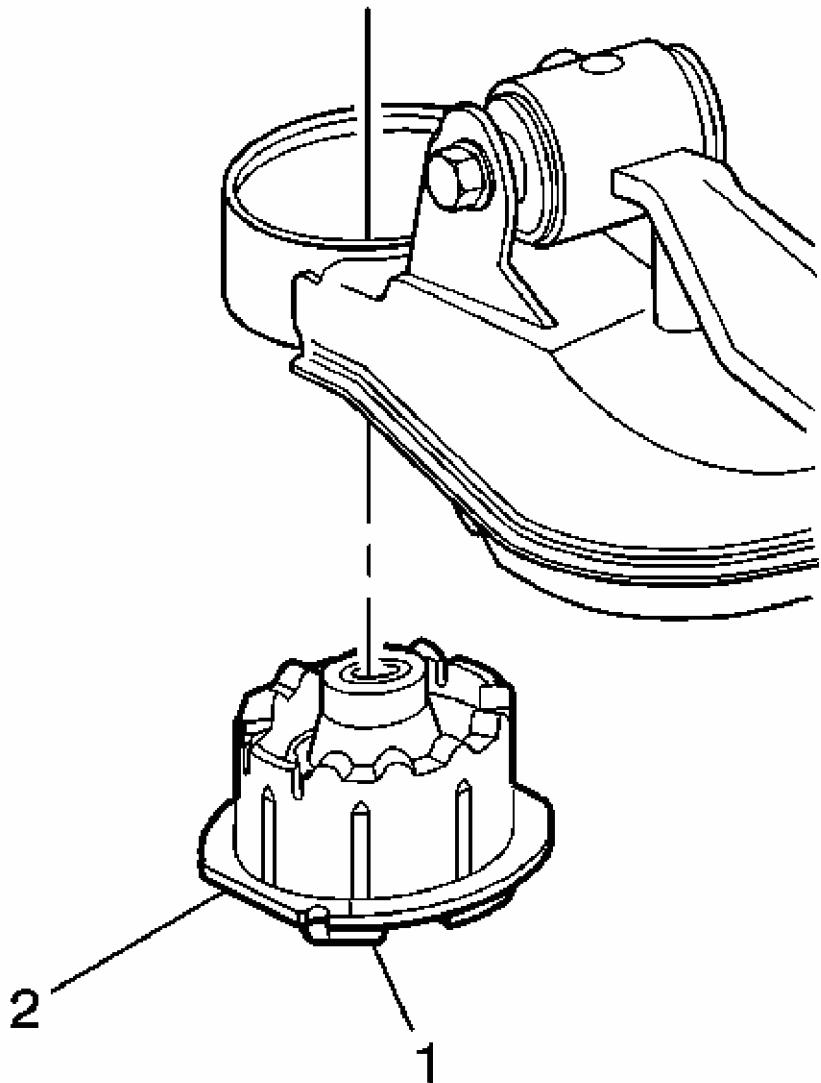
6. Lower the front end of the support assembly enough for the forward mount (1) removal.



**Fig. 29: Removing/Installing Forward Body Mount**  
**Courtesy of GENERAL MOTORS CORP.**

7. Bend the tabs (1) on the inboard mount (2) and tap the mount downward and out of the support assembly.

**Installation Procedure**



**Fig. 30: Removing/Installing Forward Body Mount**  
**Courtesy of GENERAL MOTORS CORP.**

1. Tap the mount into the support assembly, ensuring that the flat is outboard (2) and the notch (1) is rearward upon installation.
2. Bend the tabs outboard with a large pair of channel lock pliers.
3. Raise the support assembly to the body of the vehicle.

**NOTE:** Refer to Fastener Notice.

4. Install the two bolts securing the front of the support assembly to the vehicle body.

**Tighten:** Tighten the bolts to 181 N.m (133 lb ft).

5. Install the brackets to the body at the support assembly forward mounts.

**Tighten:** Tighten the bolts to 86 N.m (63 lb ft).

6. Install the exhaust system. Refer to [\*\*Exhaust System Replacement \(RPO L26\)\*\*](#) or [\*\*Exhaust System Replacement \(RPO LD8\)\*\*](#).

7. Lower the vehicle.

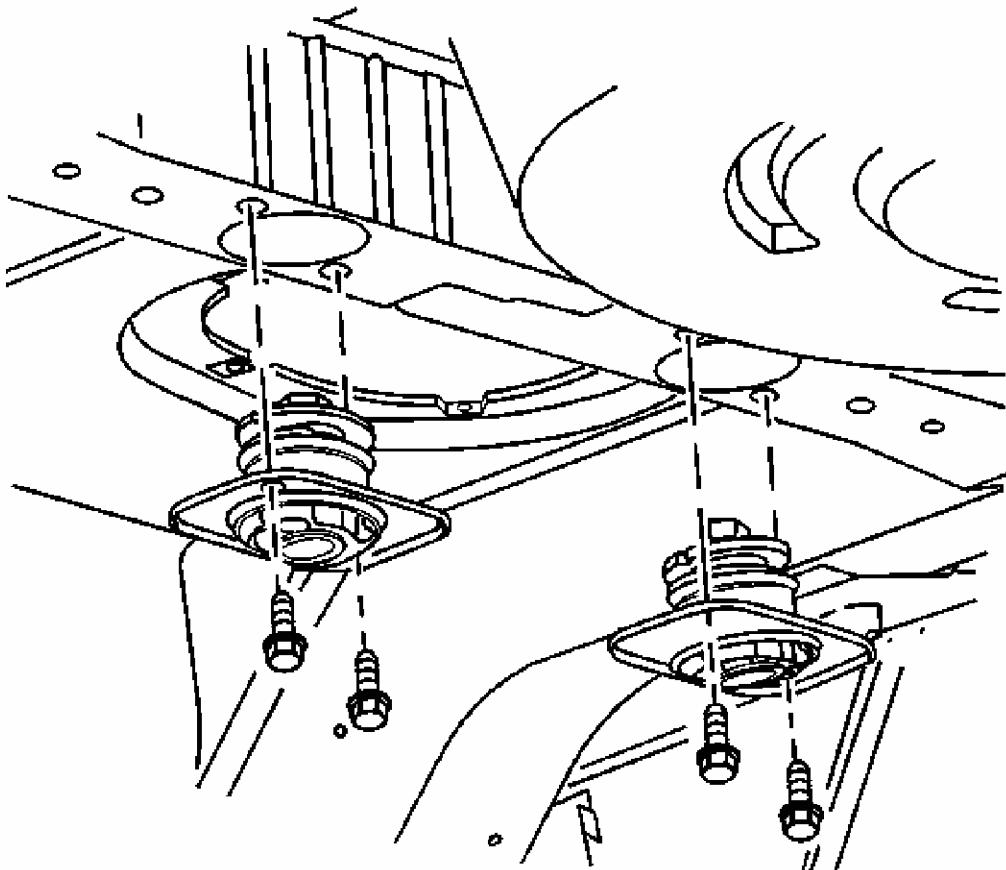
## **REAR BODY MOUNT REPLACEMENT**

### **Removal Procedure**

1. Raise and support the vehicle. Refer to [\*\*Lifting and Jacking the Vehicle\*\*](#).
2. Remove the tire and wheel. Refer to [\*\*Tire and Wheel Removal and Installation\*\*](#).
3. Support the exhaust and the rear of the support assembly. Use a block of wood at least 7 inches long.
4. Remove the exhaust hangers.
5. Remove the rear support assembly mounting bolts and lower the rear support assembly and exhaust together.

## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne

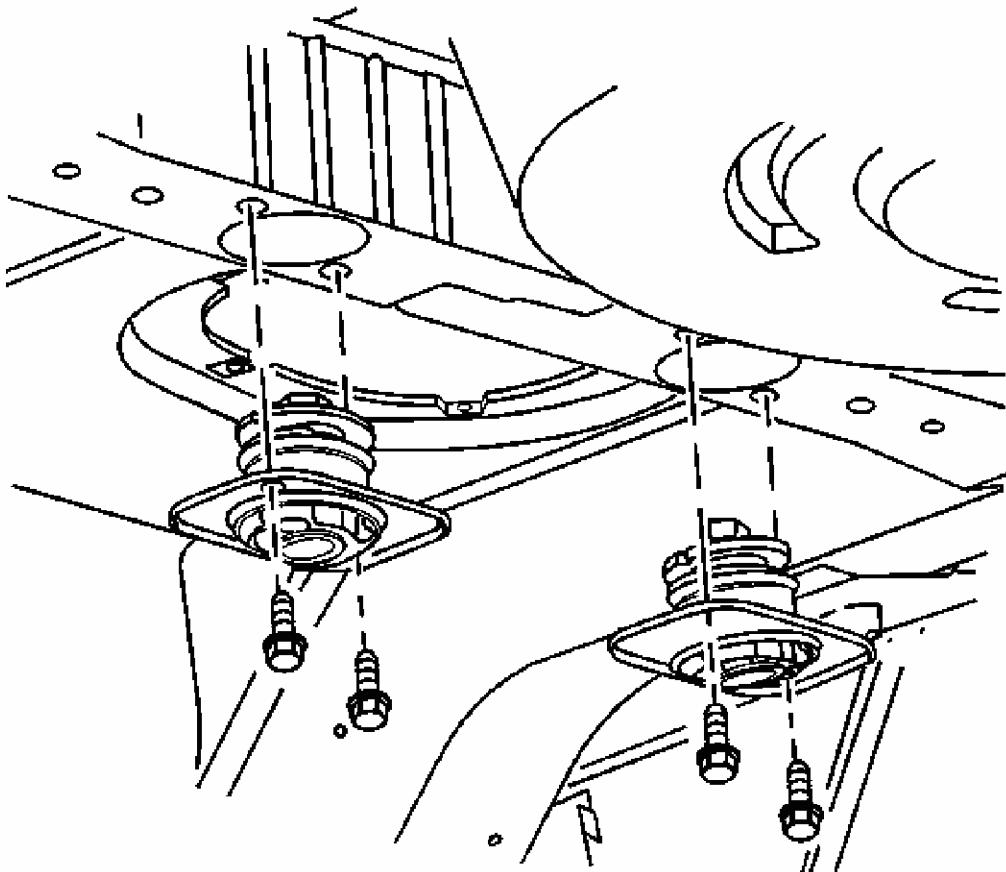


**Fig. 31: Removing/Installing Rear Body Mount**

Courtesy of GENERAL MOTORS CORP.

6. Remove the rear body mount mounting bolts.
7. Remove the rear body mount.

#### Installation Procedure



**Fig. 32: Removing/Installing Rear Body Mount**

Courtesy of GENERAL MOTORS CORP.

1. Install the rear body mount and the two bolts ensuring that OUT is toward the outboard of the vehicle.

**NOTE:** Refer to Fastener Notice.

2. Install the rear body mount mounting bolts.

**Tighten:** Tighten the rear body mount mounting bolts to 77 N.m (57 lb ft).

3. Raise and support the exhaust system and rear support assembly.
4. Install the rear support assembly mounting bolts.

**Tighten:** Tighten the rear support assembly mounting bolt to 181 N.m (133 lb ft).

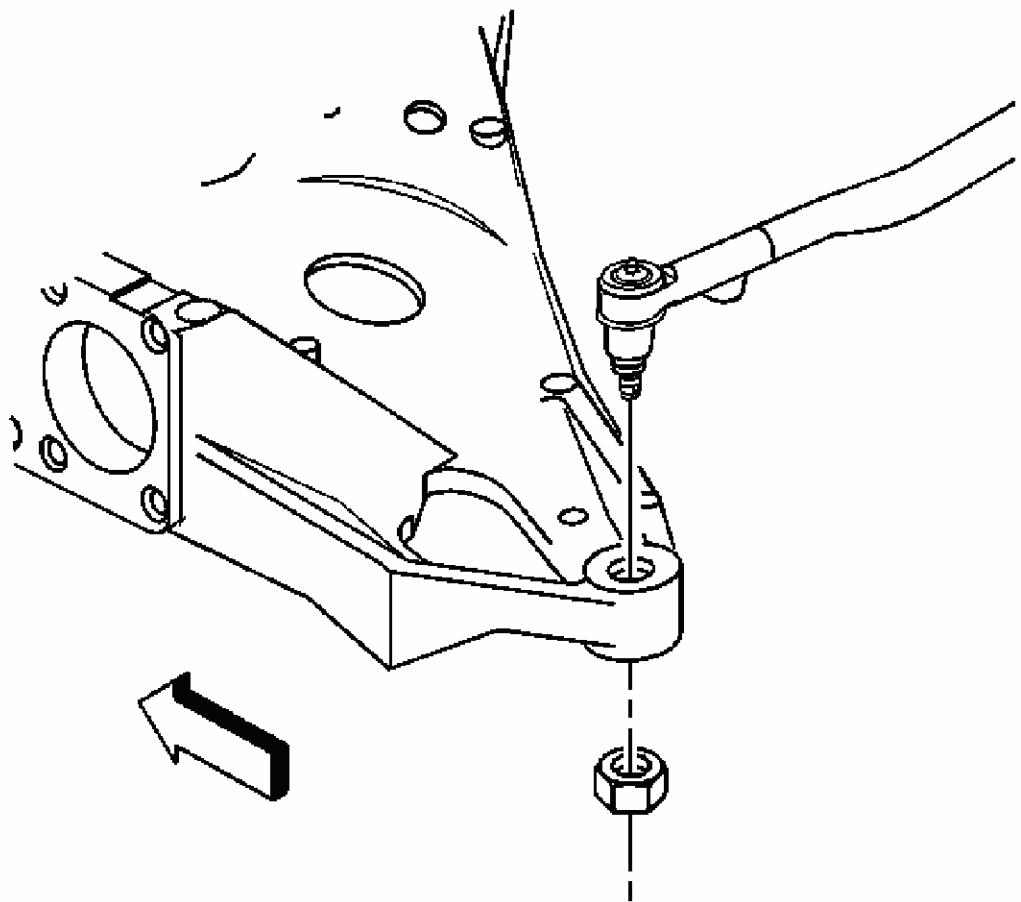
5. Install the exhaust hangers
6. Install the tire and the wheel. Refer to [\*\*Tire and Wheel Removal and Installation\*\*](#).
7. Lower the vehicle.

## **ADJUSTMENT LINK REPLACEMENT**

### **Tools Required**

**J 24319-B** Steering Linkage Puller

### **Removal Procedure**



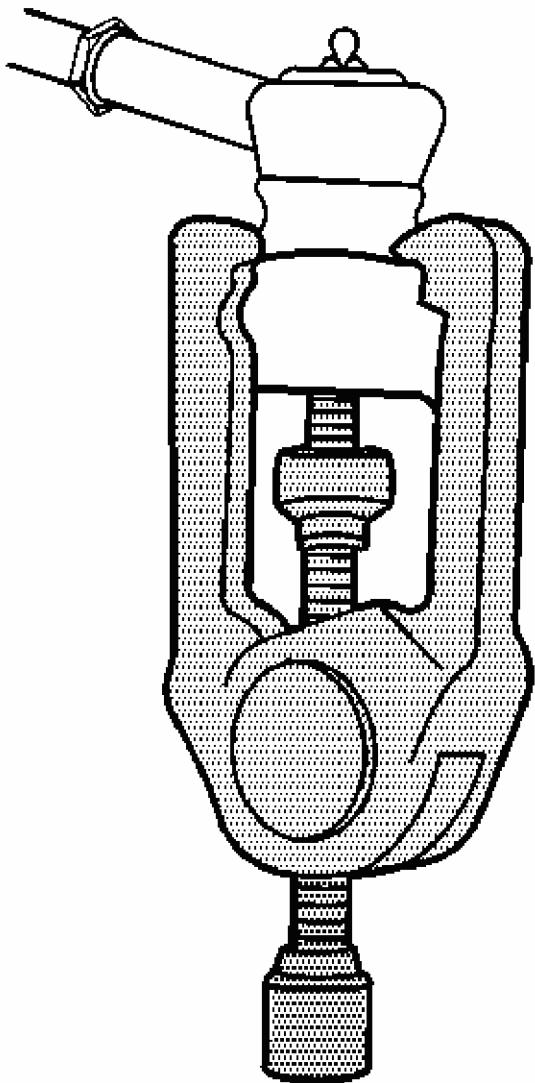
**Fig. 33: Adjustment Link To Lower Control Arm**  
Courtesy of GENERAL MOTORS CORP.

1. Raise and support the vehicle. Refer to [\*\*Lifting and Jacking the Vehicle\*\*](#).

## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne

2. Remove the nut from the adjustment link.

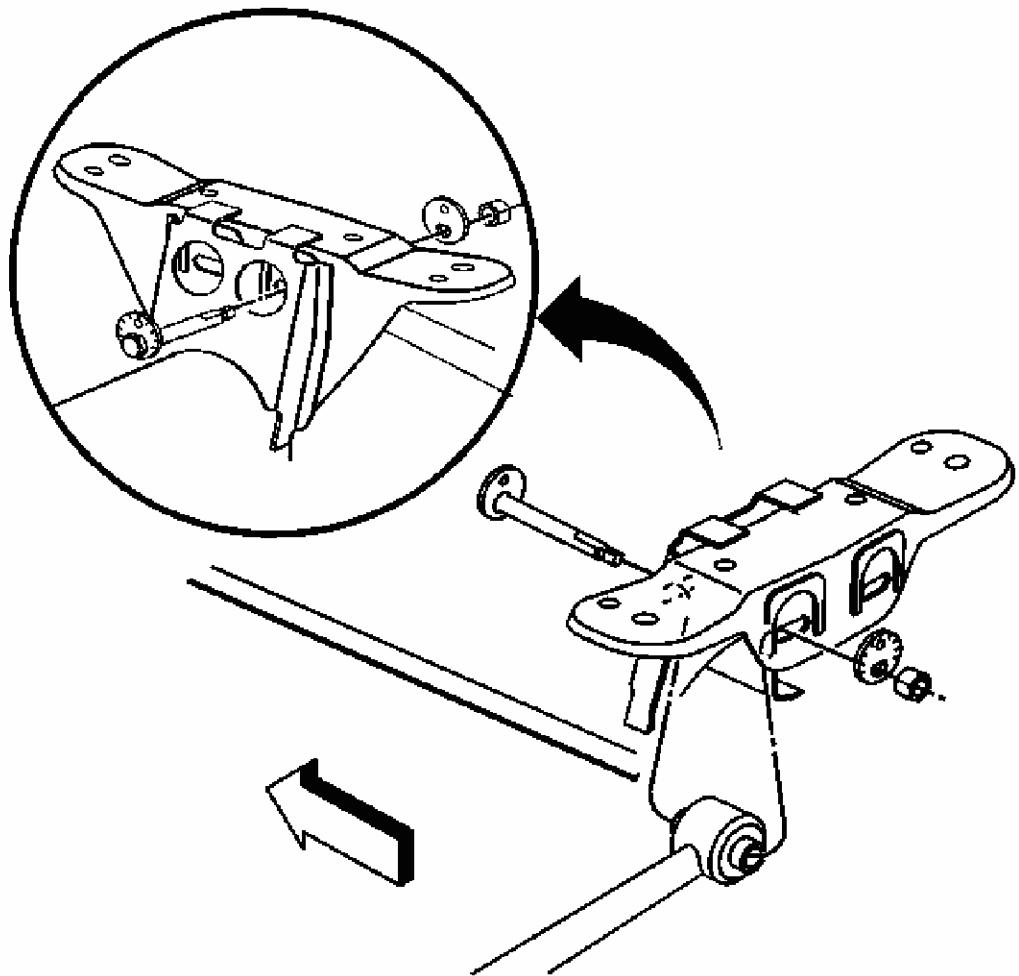


**Fig. 34: Removing Outer Tie Rod Assembly From Steering Knuckle**  
Courtesy of GENERAL MOTORS CORP.

3. Use the **J 24319-B** to separate the adjustment link from the control arm.
4. Remove the exhaust. Refer to **Exhaust System Replacement (RPO L26)** or **Exhaust System Replacement (RPO LD8)**.
5. Remove the rear suspension support. Refer to **Rear Support Replacement**.

## 2006 Buick Lucerne CXS

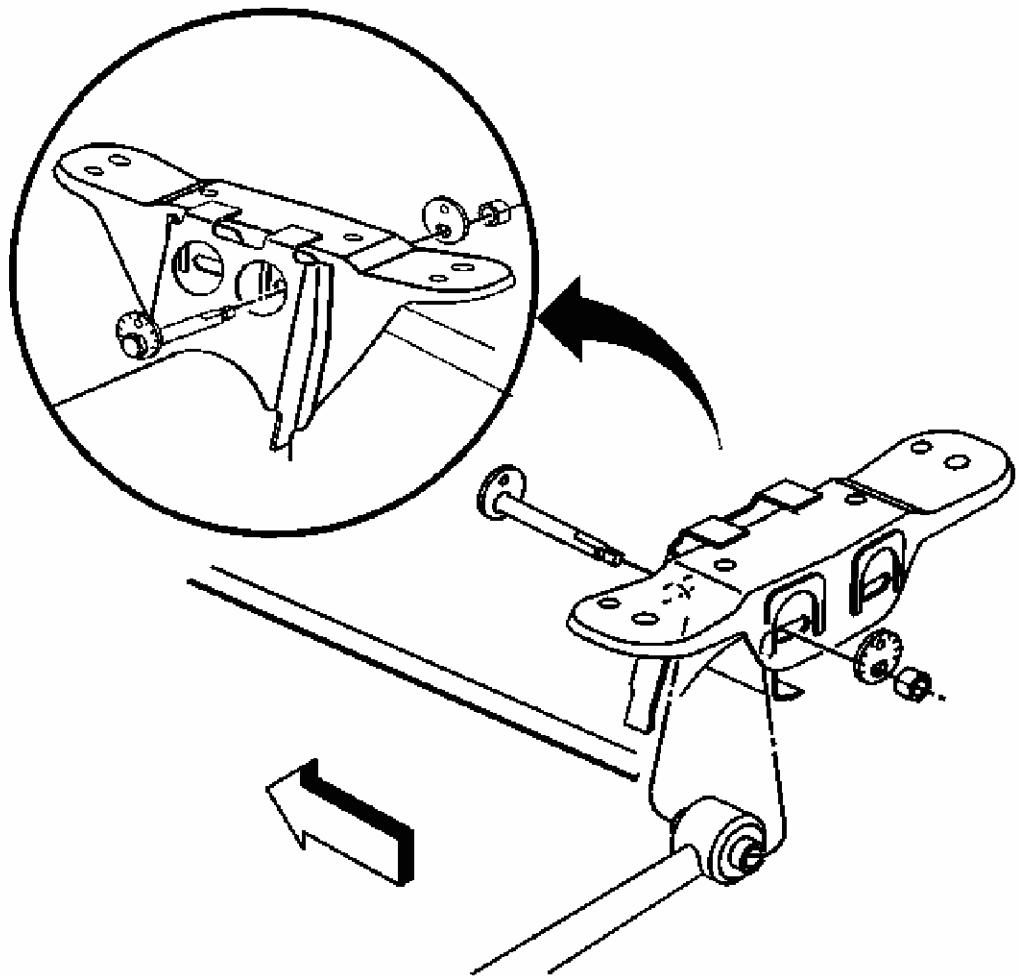
### 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 35: Loosening Inner Adjustment Link Retaining Nut**  
Courtesy of GENERAL MOTORS CORP.

6. Remove the cam lock nut and the bolt.
7. Remove the adjustment link from the support assembly.

#### Installation Procedure



**Fig. 36: Loosening Inner Adjustment Link Retaining Nut**  
Courtesy of GENERAL MOTORS CORP.

1. Install the adjustment link to the support assembly.

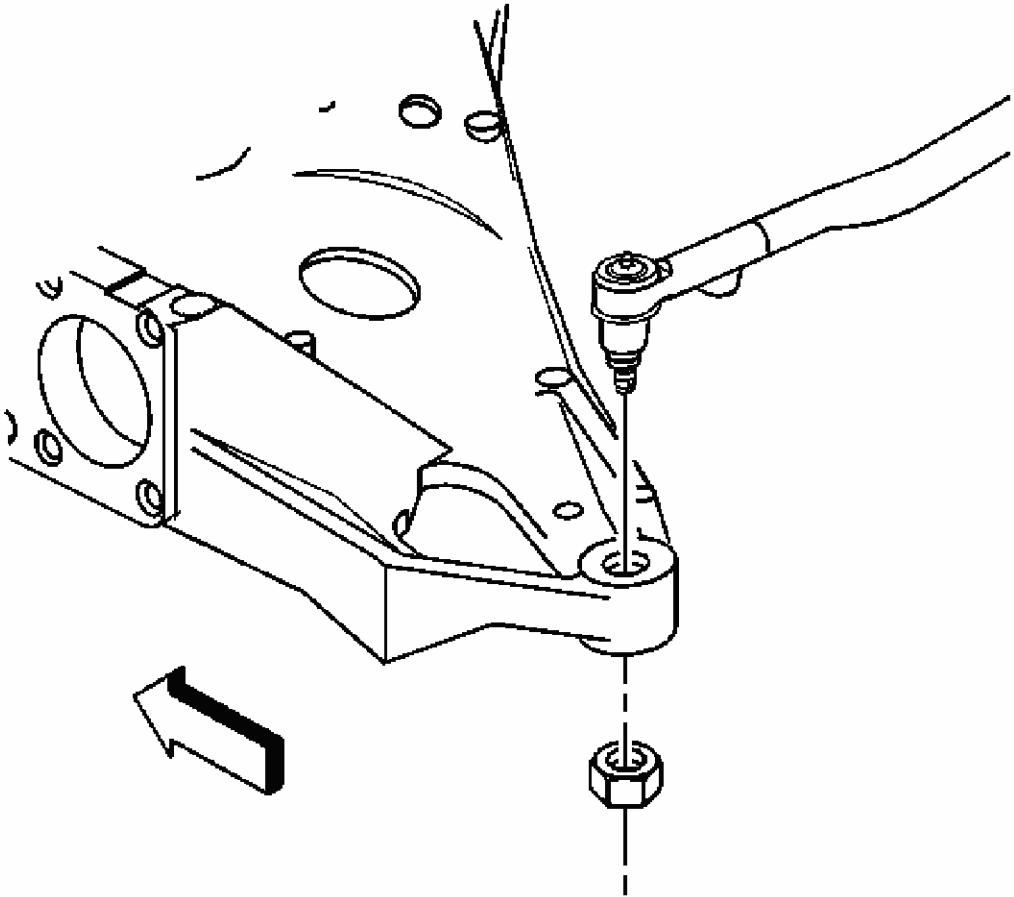
**NOTE:** Refer to Fastener Notice .

2. Install the cam lock nut, washer and bolt.

**Tighten:** Tighten the cam lock nut to 91 N.m (67 lb ft).

## **2006 Buick Lucerne CXS**

## 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 37: Adjustment Link To Lower Control Arm**  
Courtesy of GENERAL MOTORS CORP.

3. Install the adjustment link to the control arm.
4. Install the adjustment link nut.

**Tighten:** Tighten the nut to 30 N.m (22 lb ft) then tighten an additional 180 degrees.

5. Install the rear suspension support. Refer to [\*\*Rear Support Replacement\*\*](#).
6. Install the exhaust. Refer to [\*\*Exhaust System Replacement \(RPO L26\)\*\*](#) or [\*\*Exhaust System Replacement \(RPO LD8\)\*\*](#).
7. Lower the vehicle.
8. Check the rear toe adjustment. Refer to [\*\*Rear Toe Adjustment\*\*](#).

# **SUSPENSION SHOCK/STRUT DISPOSAL**

## **2006 Buick Lucerne CXS**

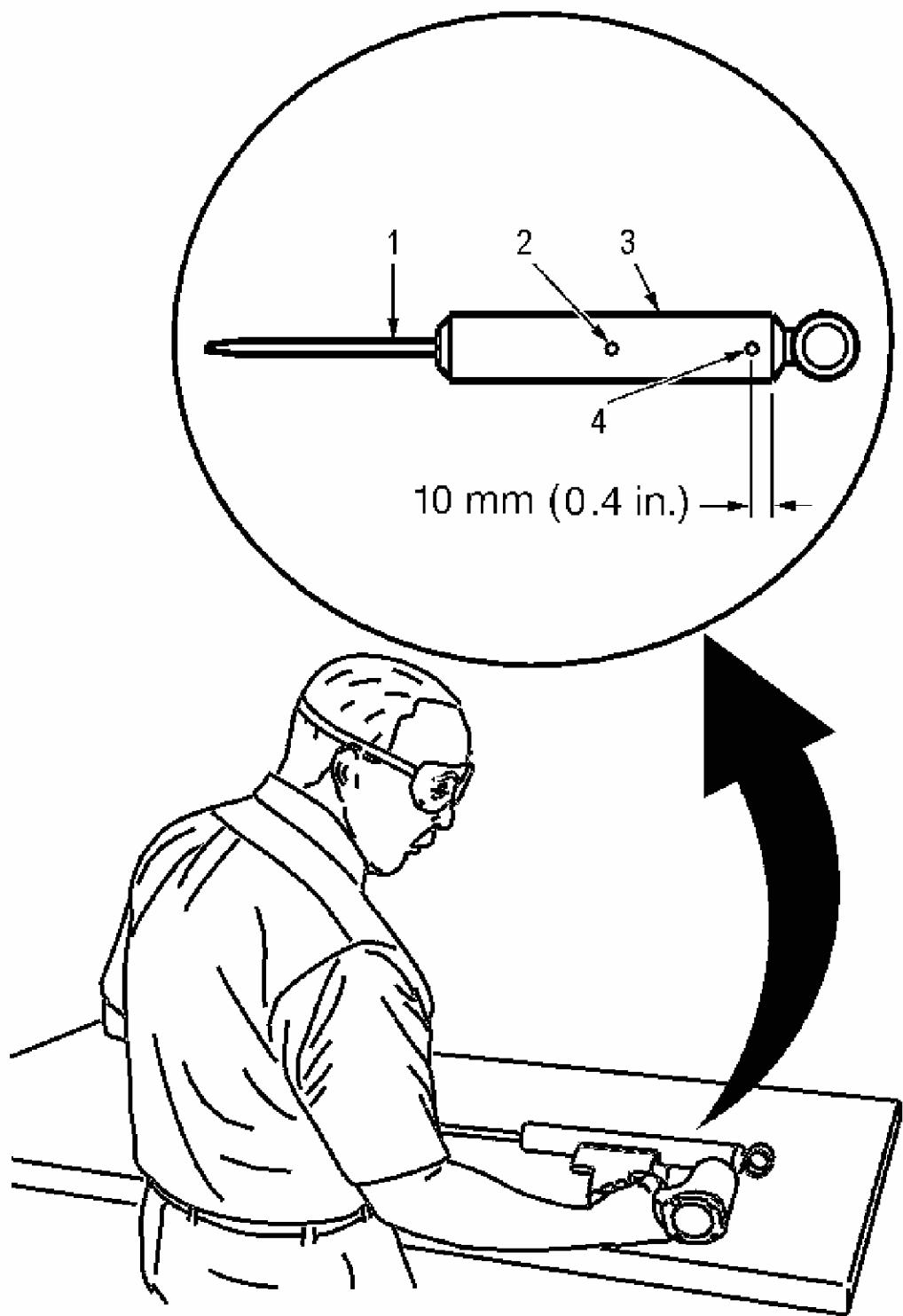
### **2006 SUSPENSION Rear Suspension - Lucerne**

**CAUTION:** Gas charged shock absorbers contain high pressure gas.  
Do not remove the snap ring from inside the top of the tube.  
If the snap ring is removed, the contents of the shock  
absorber will come out with extreme force which may result  
in personal injury.

**CAUTION:** To prevent personal injury, wear safety glasses when  
centerpunching and drilling the shock absorber. Use care  
not to puncture the shock absorber tube with the  
centerpunch.

## 2006 Buick Lucerne CXS

### 2006 SUSPENSION Rear Suspension - Lucerne



**Fig. 38: Drilling Hole In Shock Absorber At Centerpunched Locations**  
Courtesy of GENERAL MOTORS CORP.

1. Make an indentation 10 mm (0.4 in) from the bottom (4) of the tube (3) using a centerpunch.
2. Clamp the shock absorber in a vise horizontally with the shock absorber rod (1) completely extended.
3. Drill a hole in the shock absorber at the centerpunch (4) using a 5 mm (3/16 in) drill bit. Gas or a gas/oil mixture will exhaust when the drill bit penetrates the shock absorber. Use shop towels in order to contain the escaping oil.
4. Make an indentation in the middle (2) of the tube (3) with a centerpunch.
5. Drill a second hole in the shock absorber at the centerpunch (2) using a 5 mm (3/16 in) drill bit. Oil will exhaust when the drill bit penetrates the shock absorber. Use shop towels in order to contain the escaping oil.
6. Remove the shock absorber from the vise. Hold the shock absorber over a drain pan horizontally with the holes down. Move the rod (1) in and out of the tube (3) to completely drain the oil from the shock absorber.

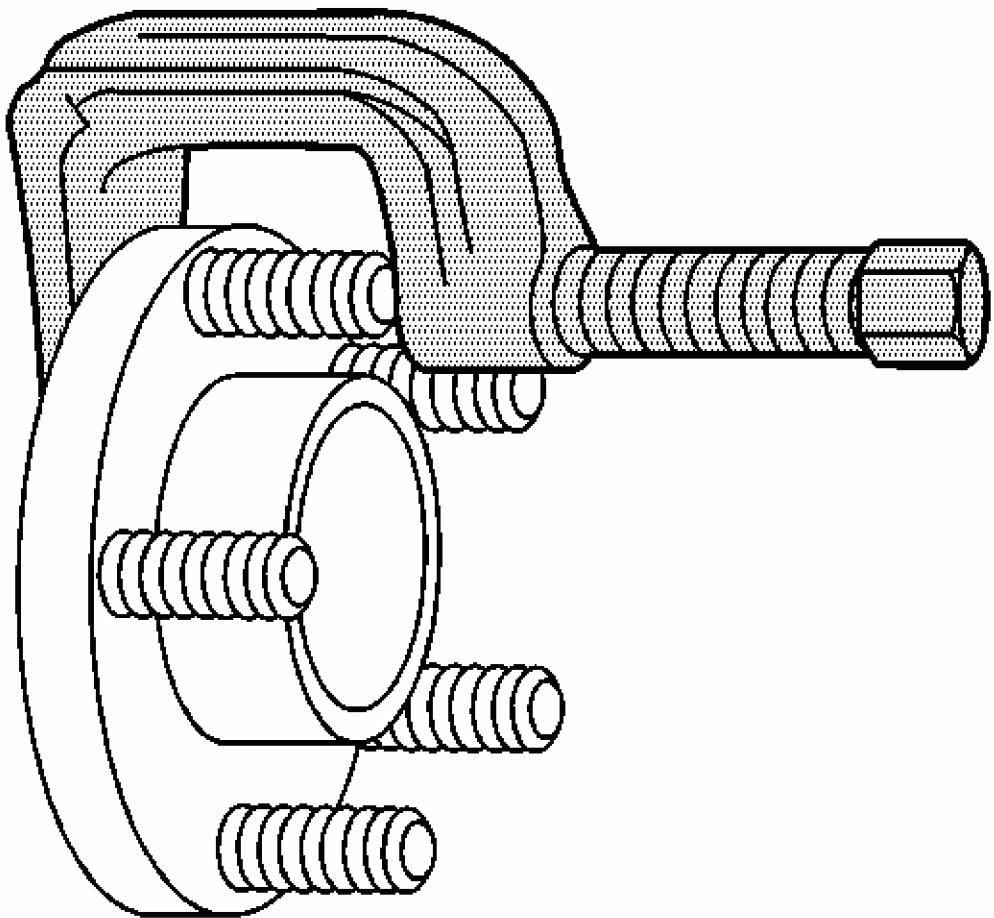
## **WHEEL STUD REPLACEMENT**

### **Tools Required**

**J 35917** Ball Joint Remover. See [Special Tools](#).

### **Removal Procedure**

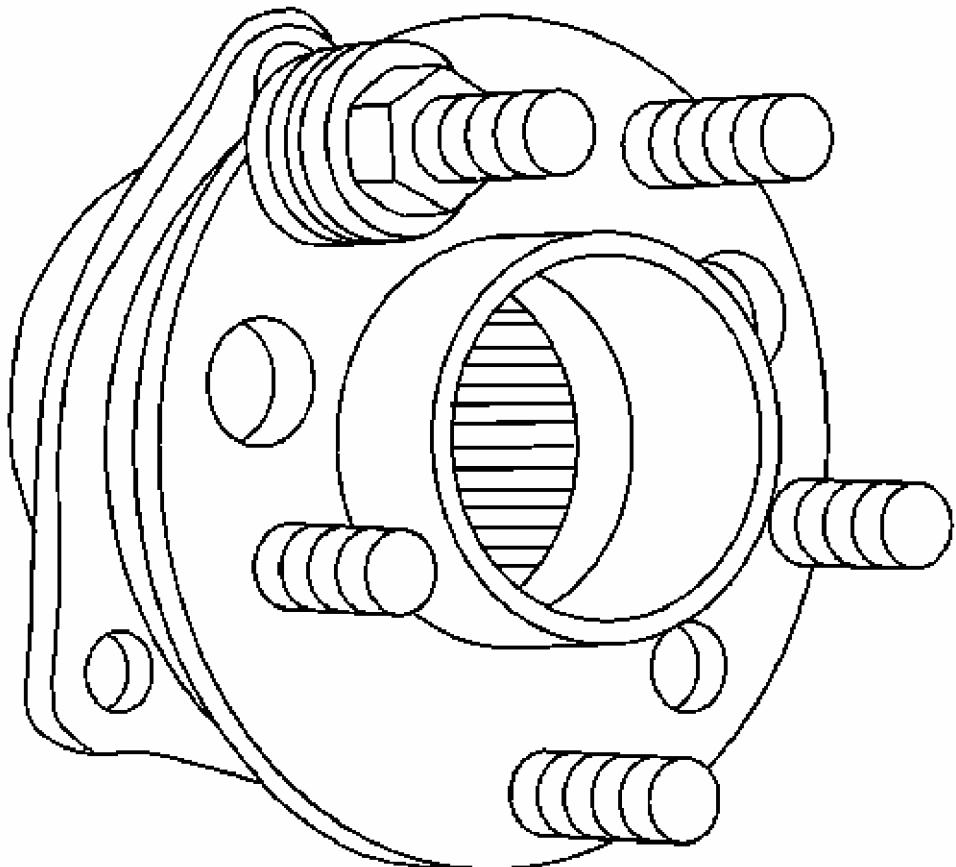
1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#) .
2. Remove the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#) .



**Fig. 39: Removing Wheel Stud From Axle Flange**  
**Courtesy of GENERAL MOTORS CORP.**

3. Remove the brake rotor. Refer to [Rear Brake Rotor Replacement](#).
4. Using **J 35917** press the wheel stud from the wheel bearing/hub assembly. See [Special Tools](#).

**Installation Procedure**



**Fig. 40: Installing Wheel Stud**  
Courtesy of GENERAL MOTORS CORP.

1. Install the new stud from the back side of the hub.
2. Install flat washers on the wheel stud.

**IMPORTANT: Ensure that the wheel stud is fully seated against the wheel hub flange.**

3. With the flat side of a wheel nut against the washers, tighten the wheel nut until the wheel stud head seats against the wheel hub flange.
4. Install the brake rotor. Refer to [Rear Brake Rotor Replacement](#).
5. Install the tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).

6. Lower the vehicle.

## **DESCRIPTION AND OPERATION**

### **REAR SUSPENSION DESCRIPTION AND OPERATION**

The rear suspension consists of independent control arms, springs and struts for each rear wheel. This enables the vertical movement of one rear wheel without affecting the other. A suspension adjustment link on each arm provides for toe adjustment and minimal alignment variation during suspension movement. A stabilizer shaft minimizes body roll.

The bottom of each shock attaches to the suspension knuckle and the top of each shock attaches to the reinforced body area. The shocks are non-adjustable and non-refillable. Shocks require replacement under the following conditions:

- Loss of resistance
- Damage
- Leaking fluid

Some vehicles have electronic level control (ELC), which utilizes air adjustable shocks. ELC maintains the rear trim height under a wide range of loads. Refer to ELC, as applicable.

A single unit hub and bearing is bolted to the rear knuckle. This sealed unit eliminates the need for wheel bearing adjustments and periodic maintenance. The hub and bearing has an integral speed sensor ring on the inboard side of the bearing for antilock brake functions. The wheel speed sensor is within the knuckle.

## **SPECIAL TOOLS AND EQUIPMENT**

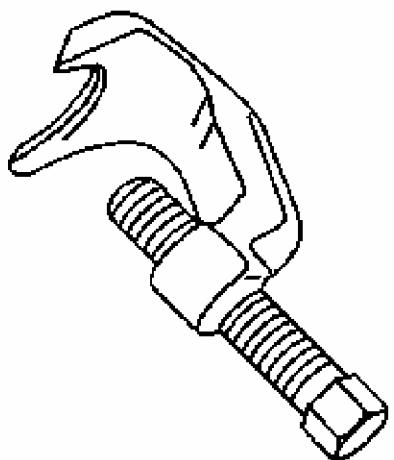
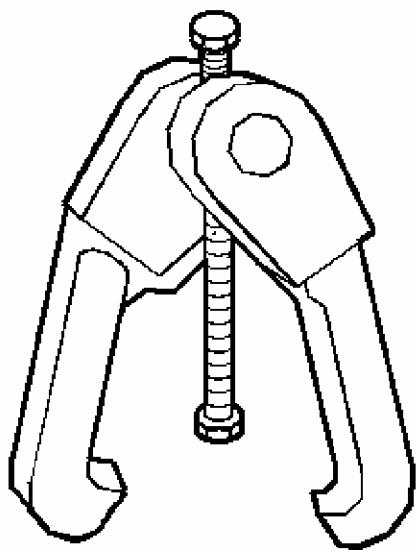
### **SPECIAL TOOLS**

#### **Special Tools**

<b>Illustration</b>	<b>Tool Number/Description</b>
	J 24319-B Universal Steering Linkage Puller

## 2006 Buick Lucerne CXS

2006 SUSPENSION Rear Suspension - Lucerne



J 35917  
Ball Joint Remover

## **2006 Buick Lucerne CXS**

2006 SUSPENSION Rear Suspension - Lucerne

## **2006 Buick Lucerne CXS**

2006 SUSPENSION Rear Suspension - Lucerne

## **2006 Buick Lucerne CXS**

2006 SUSPENSION Rear Suspension - Lucerne

## **2006 Buick Lucerne CXS**

2006 SUSPENSION Rear Suspension - Lucerne